

**CITY OF NEWTON
PURCHASING DEPARTMENT**

CONTRACT FOR PARKS & RECREATION DEPARTMENT

**PROJECT MANUAL:
IMPROVEMENTS TO
EMERSON PLAYGROUND
*INVITATION FOR BID #14-142***

Bid Opening Date: July 3, 2014 at 10:30 a.m.

JUNE 2014

Setti D. Warren, Mayor

CITY OF NEWTON
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END OF SECTION

**CITY OF NEWTON
PURCHASING DEPARTMENT
INVITATION FOR BID No. #14-142**

The City of Newton invites sealed bids from Contractors for

IMPROVEMENTS TO EMERSON PLAYGROUND

Pre-bid Meeting: 10:30 a.m., Thursday, June 26, 2014 located at Pettee Street

Bids will be received until: 10:30 a.m., Thursday, July 3, 2014

at the Purchasing Department, Room 204, Newton City Hall, 1000 Commonwealth Avenue, Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the deadline for bids. Following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

All bidders are encouraged to attend the pre-bid conference. No allowance or adjustment to the contract price will be made on account of bidder's failure to become fully familiar with local conditions affecting the cost of work.

Work for this contract consists of site preparation, installation of a new playground with resilient rubber surfacing, new play equipment, re-installation of existing site furnishings, new vinyl coated chain link fencing and single gate, new seeded lawn and plantings, precast concrete curbing, bituminous concrete walks, new concrete walks.

Time is of the essence on this project. Work is expected to begin upon execution of this contract and shall be substantially completed by November 1, 2014.

Contract Documents will be available for pickup at the Purchasing Department or by downloading them from www.newtonma.gov/bids, after 10:00 a.m., June 19, 2014. There is no charge for contract documents.

All bids must be accompanied by a bid deposit in an amount that is not less than five percent (5%) of the value of the bid, including all add alternates. Bid deposits, payable to the City of Newton, shall be either in the form of a bid bond, cash, certified check, or a treasurer's or cashier's check issued by, a responsible bank or trust company.

All bids shall be submitted as one ORIGINAL and two COPIES. Award shall be made to the lowest responsible and eligible bidder including all accepted alternates.

All bids are subject to the provisions of M.G.L. Chapter 30, Section 39M. **Wages are subject** to minimum wage rates determined by the Massachusetts Department of Labor and Industries pursuant to M.G.L. Chapter 149, Sec. 26 to 27H. The schedule of wage rates applicable to this contract is included in the bidding documents. In addition, the prevailing wage schedule will be updated annually for all public construction projects lasting longer than one (1) year. You will be required to pay the rates set out in any updated prevailing wage schedule. Increases in prevailing wage schedules will not be the basis for change order requests. The successful bidder will be required to provide a Certificate of Insurance demonstrating current coverage of the type and amounts set forth in the Project Manual. The successful bidder will be required to furnish a **Labor and Materials Payment Bond in the amount of 50%** of the contract total.

It is the sole responsibility of the contractor downloading these bids to ensure it has received any and all **addenda** prior to the bid opening. If you download bids from the internet site and would like to make it known that your company has done so, you may fax or email purchasing@newtonma.gov the Purchasing Department. (617-796-1227) with your NAME, ADDRESS, PHONE, FAX **AND INVITATION FOR BID NUMBER. Drawings for this project may be obtained through the City of Newton's Purchasing Department.**

The City will reject any and all bids in accordance with the above referenced General Laws. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all bids (in whole or in part) if it be in the public interest to do so.

CITY OF NEWTON



Chief Procurement Officer
June 19, 2014

CITY OF NEWTON
DEPARTMENT OF PURCHASING
INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
 2. The Bidder has visited the work site and is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents and work site will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will only answer such requests if received by **Friday, June 27, 2014 at 12:00 noon**. In the event that the bid opening date is changed, the deadline for informational requests may also change as provided in an addendum issued by the City.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- 2.4 Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Receipt of all addenda issued must be acknowledged in the Bid Form. **YOUR FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN YOUR BID BEING REJECTED AS NON-RESPONSIVE.**
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- 2.7 Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and **INVITATION FOR BID #14-142**.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on "Bid Form #14-142" as appropriate, furnished by the City.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 Bid Deposits shall be submitted in the amount specified in the Invitation for Bids. They shall be made payable to the City and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submission date. **Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.**

Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the City-Contractor agreement.

- 4.5 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:

- * GENERAL BID FOR: **#14-142**
- * NAME OF PROJECT: **Improvements to Emerson Playground**
- * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER

- 4.6 Date and time for receipt of bids is set forth in the Invitation for Bids.
- 4.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.8 Bids shall be submitted with one **original** and two **copies**.
- 4.9 Be advised that a new Massachusetts law has been enacted that required all employees who work on Massachusetts public works construction sites must have no less than 10 hours of OSHA-approved safety and health training. See Chapter 306 of the Acts of 2004, which became effective July 1, 2006.
1. This requirement will apply to any general bid or sub bid submitted.
 2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
 3. The contractor and all subcontractors on this project will be required to provide certification of compliance with this requirement. Non-compliance with this law will disqualify you from bidding on public contracts.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- 5.2 In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- 6.1 Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

ARTICLE 7 - CONTRACT AWARD

- 7.1 The City is soliciting prices for the supplies and services set forth in Bid Item Sheets #14-142, attached hereto. It is the City's intent to award one (1) contract to the responsible and eligible bidder offering the lowest Total Bid Price. . A contract will be awarded within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- 7.4 As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.
- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

ARTICLE 9 – PROPRIETARY SPECIFICATIONS

- 9.1 The City has used a proprietary specification to describe a supply listed in the specifications. Such specifications are permitted under M.G.L. c. 30, §39M(b), provided that the City state in writing that use of the proprietary specification is in its best interest and that it will accept an "equal" of the item specified. An item is considered equal if (i) it is at least equal in quality, durability, appearance, strength, and design; (ii) will perform the intended function at least equally; and (iii) conforms substantially, even with deviations, to the detailed requirements contained in the specifications. Bidders wishing to provide an equal item should do so with their bids. The City shall have the sole right to determine whether or not said item is equal.
- 9.2 The required determination and justification have been duly prepared, and a copy may be requested in accordance with the Massachusetts Public Records Law, M.G.L. c. 66, §10.

CITY OF NEWTON
DEPARTMENT OF PURCHASING
BID FORM #14-142

- A. The undersigned proposes to furnish all labor and materials required in accordance with the Contract Documents supplied by the City of Newton entitled:

IMPROVEMENTS TO EMERSON PLAYGROUND

for the contract price specified below, subject to additions and deduction according to the terms of the specifications.

- B. This bid includes addenda number(s) _____, _____, _____, _____.

- C. The Contractor shall insert prices for each item in ink, in both words and figures.

\$ _____ Dollars (\$ _____).
(The figure inserted above shall be the Total Bid Price as computed on the Item Sheets at pp. 9-10 below..)

COMPANY: _____

- D. Prompt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Discounts will not be considered in determining the lowest responsible bidder.

Prompt Payment Discount _____ % _____ Days
Prompt Payment Discount _____ % _____ Days
Prompt Payment Discount _____ % _____ Days

- E. The undersigned has completed and submits herewith the following documents:

- ☐ Bid Form - signed, 2 pages
- ☐ Bid Item Sheets, 2 pages
- ☐ Bidder's Qualifications and References Form, 2 pages
- ☐ Certificate of Non-Collusion, 1 page
- ☐ Debarment Letter, 1 page
- ☐ IRS Form W-9, 1 page
- ☐ A five percent (5%) bid deposit/bid guarantee.

- F. The undersigned agrees that, if selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the City of Newton, execute a contract in accordance with the terms of this bid and furnish a labor and materials or payment bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the City of Newton and each in the sum not less than 50% of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

The undersigned hereby certifies that it is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that they will comply fully with all laws and regulations applicable to awards made subject to M.G.L. Chapter 30, Section 39M. The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies that s/he intends to comply with the City of Newton Minority/Women Business Enterprise Plan dated December 1999 to further expand business opportunities for minority firms, and that s/he shall comply with the minority manpower ratio and specific action steps contained in the City of Newton, Massachusetts Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from public contracting or subcontracting in the Commonwealth under the provisions of M.G.L. Chapter 29, Section 29F or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date _____

(Name of General Bidder)

BY: _____

(Printed Name and Title of Signatory)

(Business Address)

(City, State, Zip)

_____/_____
(Telephone) (FAX)

(E-mail address)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

CITY OF NEWTON
DEPARTMENT OF PURCHASING
BID ITEM SHEETS #14-142

Bid Items	Estimated Quantity	Unit Price	Total price
1. General Conditions of City of Newton Contract, including Police details (All police details will be paid for by the Parks and Recreation Department based on actual cost, and the Lump Sum is provided as an estimate only.)	1	LS	\$2,000.00
2. Miscellaneous Work Allowance (Landscape Architect's Discretionary Fund)	1	ALLOW	\$1,000.00
3. Tree Protection	1 LS	\$_____	\$_____
4. Tree Pruning	1 LS	\$_____	\$_____
5. Remove and dispose of mulch surface	250 CY	\$_____	\$_____
6. Remove and dispose of ex. double timber edge	325 LF	\$_____	\$_____
7. Remove and dispose of ex. play equipment	1 LS	\$_____	\$_____
8. Remove & dispose of 4' ht. chain link fence and footings	95 LF	\$_____	\$_____
9. Temporary Construction fence 8' ht.- set up & remove	325 LF	\$_____	\$_____
10. Remove and dispose of ex. bit. conc. pavement	25 SF	\$_____	\$_____
11. Strip and Stockpile Topsoil	120 CY	\$_____	\$_____
12. Excavation, Removal & Disposal of all unsuitable and surplus excavated materials from Site	10 CY	\$_____	\$_____
13. Excavation, Backfilling, Rough Grading and Decompacting	100 CY	\$_____	\$_____
14. Bituminous Concrete Walk Paving	185 SY	\$_____	\$_____
15. Resilient Safety Surface	4700 SF	\$_____	\$_____
16. Concrete Walk Paving	360 SF	\$_____	\$_____
17. Straight Precast Concrete Curb	300 LF	\$_____	\$_____
18. New 8' Bench	3 EA	\$_____	\$_____
19. New Accessible Picnic Table	1 EA	\$_____	\$_____
20. New Picnic Table	1 EA	\$_____	\$_____
21. Play Equipment 'A', 'B', 'C' and 'D'	1 LS	\$_____	\$_____
22. 4' ht. Vinyl Chain Link Fence	100 LF	\$_____	\$_____
23. Topsoil Spread and Fine-Graded from Stockpile	120 CY	\$_____	\$_____

24. Seeded Lawn	5100 SF	\$_____	\$_____
25. Ulmus americana ‘Valley Forge’	1 EA	\$_____	\$_____
26. Acer saccharum ‘Bonfire’	2 EA	\$_____	\$_____
27. New 12” HDPE Drain Line	93 LF	\$_____	\$_____
28. New Drainage Work	1 LS	\$_____	\$_____

Total Bid Price (*Bid Items 1-28*) = \$_____

(Total Bid Price must be entered in “PARAGRAPH C” of the BID FORM)

COMPANY _____

SECTION 01 21 00 - MISCELLANEOUS WORK ALLOWANCE

Item 2 Miscellaneous Work Allowance

Allowance

PART 1- GENERAL

1.01 Description:

- A. The intent of this Section is not for work or materials typically incidental to the work items performed and/or rendered under this Contract, or is for work and/or materials which are otherwise called for under these specifications, and/or for work which is indicated on the plans, but for work and materials which are unique in nature and rendered as a direct request of the Owner's Representative. These items of work shall be completed only when and as directed by the Owner's Representative. The Contractor may not proceed with any work under this Section without the written notice of the Owner's Representative to complete the work under the "Miscellaneous Work Allowance".
- B. The Sum to be allowed for the work of this Item 2 shall be one thousand dollars (\$1,000.00).
- C. The City shall retain a cash credit in full or in part, in the event that the final cost of materials and/or equipment is lower than the original cash allowance provided.
- D. The "Owner's Representative" shall be a person identified to the Contractor in writing as the person authorized to act on the Owner's behalf.

PART 2 - MATERIALS Not Used

PART 3 - EXECUTION Not Used.

PART 4 - COMPENSATION

4.01 Basis of Payment:

- A. Payment for work completed under Item 2 shall be as specified above, in full or in part, as preapproved by the Owner's Representative.

Item 2 Miscellaneous Work Allowance

\$1,000.00

END OF SECTION
01 21 00

SECTION 02 41 13 – SELECTIVE SITE DEMOLITION

Item 3	Tree Protection Fence -	Lump Sum
Item 4	Tree Pruning -	Lump Sum
Item 5	Mulch Surface removal and disposal -	Cubic Yard
Item 6	Double Timber Edge removal and disposal -	Linear Foot
Item 7	Ex. Play Equipment removal and disposal -	Lump Sum
Item 8	Ex. 4' Chain Link Fence removal and disposal -	Linear Foot
Item 9	Temporary Construction 8' Fence - set up and removal -	Linear Foot
Item 10	Bit. Conc. Paving removal and disposal -	Square Foot

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Protection of existing trees to remain.
- B. Protection of existing utilities to remain within and adjacent to the property.
- C. Tree Pruning.
- D. Removal of play equipment, site vegetation, chain link fence, and other miscellaneous items.
- E. Removal of mulch play surface.
- F. Removal and disposal of ex. bituminous concrete paving.
- G. Installation of an 8' height chain link construction fence.
- H. Disposal of all debris legally off site.
- I. Dust control.

1.2 RELATED WORK

- A. Section 31 00 00 - Earthwork
- B. Section 32 10 00 - Bases, Ballasts, Paving and Curbing
- C. Section 32 31 00 - Chain Link Fencing
- D. Section 32 90 00 - Lawns and Planting

1.3 SUBMITTALS

- A. The Contractor shall, prior to any removal of rubbish or debris from the site, submit written evidence satisfactory to the Owner's Representative that he has an approved dumping location for debris and/or spoil from his demolition and excavation activities.
- B. Prior to beginning the work of this Contract, the Contractor shall submit a plan indicating stockpile areas and equipment and materials storage areas to the Owner's Representative for review and approval. The Contractor shall provide any security measures necessary to protect his work and equipment at no additional costs to the Owner.
- C. TREE PROTECTION PLAN: Prior to beginning the work of this Contract, the Contractor shall submit a tree protection plan indicating trees and their dbh (diameter at breast height) to the Owner's Representative and Director of Urban Forestry for review and approval.

1.4 EXAMINATION OF SITE AND DOCUMENTS

- A. By submitting a bid the Contractor affirms that he has carefully examined the site and all conditions affecting work under this Section. No claim for additional costs will be allowed because of lack of full knowledge of existing conditions.
- B. Plans, surveys, measurements, and dimensions under which the work is to be performed are believed to be correct, but the Contractor shall have examined them for himself during the bidding period, as no additional compensation will be made for errors or inaccuracies that may be found therein.

1.5 LAWS AND ORDINANCES

- A. Follow all Local, State and Federal laws and ordinances which apply to the work of this Section.

1.6 QUALITY ASSURANCE

- A. The company performing the work of this Section shall have been in operation in Massachusetts for at least 5 years performing the type of work required in this Section.
- B. All work shall be conducted by qualified and trained personnel. It is required that a person with a current Massachusetts Certified Arborist license, with a minimum of 5 full years of field experience, be on the job at all times while the work of this Section is in progress. This person shall supervise the work of pruning and trimming and shall be a member of the work crew.
 - 1. A crew shall consist of one tree trimmer/climber and one ground man (one of which shall be a crew foreman). The crew foreman shall have a minimum of 5 years climbing/pruning experience.
 - 2. Each trimmer shall be experienced and highly qualified with the necessary tree worker skills to successfully complete this work, including the ability and training to perform aerial rescue. Said skill shall also include worker safety and ability in compliance with current OSHA and ANSI Z-133.1 standards.

1.7 PRUNING STANDARDS

- A. Pruning shall conform to the "Standards for Pruning Shade Trees" of the National Arborist Association, Bedford NH and American National Standards Institute (ANSI) Standard A300 "American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices".
- B. Work operations shall meet American National Standards Institute (ANSI) Standard Z-133.1 "Tree Care Operations - Pruning, Trimming, Repairing, Maintaining and Removing Trees, and Cutting Brush - Safety Requirements".
- C. Operations shall comply with applicable Occupational Safety and Health Administration standards.

1.8 REFERENCES

- A. MassDOT: "Standard Specifications for Highways and Bridges", Massachusetts Department of Transportation, latest edition.
- B. Work operations shall meet American National Standards Institute [ANSI] Standard Z-133.1.

1.9 PUBLIC SAFETY

- A. The Contractor shall be solely responsible for pedestrian and vehicular safety and control within the work site.
- B. Protect the public from potential hazards including but not limited to: falling limbs; chippers; and equipment. On a daily basis, limit public access into the area immediately surrounding the tree(s) where work is being done. Limit access by means of a continuous rope, barricade or fence with warning signs attached.

- C. All equipment to be used and all work to be performed shall be in full compliance with all OSHA standards including, but not limited to, those regulations concerning noise levels, protective devices and operator safety. Immediately discontinue any obviously hazardous practice.
 - D. DIG SAFE - Contractor is required to contact Dig Safe at #811 or 1-888-344-7233 a minimum of 3 business days prior to start of construction.
- 2.0 SPECIAL PROTECTION FOR MAINTAINING STREETS AND PUBLIC WAYS
- A. Do not place or store material in parking lots, streets or sidewalks.
 - B. Conduct operations with minimum interference to the abutting parking lot and street.
 - C. Do not close or obstruct parking lots, streets or sidewalks within the public right-of-way without a permit.
- 2.1 ACCESS TO JOB SITE
- A. No access to the job site shall be allowed on or through the abutting private properties. Access to the job site shall be along the public rights of way.
- 2.2 USE OF PREMISES
- A. All apparatus, storage and the operation of workmen in connection with activities under this Section shall be confined to the limits of the Contract as shown on the Drawings and shall not encumber the premises at any time.
 - B. Parking for personnel, cars, trucks, etc., shall be in areas designated by the City of Newton.
 - C. Cover trucks carrying loose, dry material such as debris, vegetation, paving materials, etc., by tarpaulins to prevent blowing away or spillage of contents. Promptly remove and clean up all spillage of whatever nature.

PART 2 – PRODUCTS

2.1 CONSTRUCTION FENCE

- A. Construction Fence: Erect a galvanized chain link construction fence in locations as shown on the Drawings with a gate location to be determined in the field. Erect the fence immediately after receiving the Notice to Proceed and maintain the fence in a secure and sightly condition until instructed by the Owner's Representative to remove it or portions thereof. Second hand fencing materials meeting the requirements specified herein and in good condition may be used to provide the necessary barrier during construction on this project. Equivalent tubular sections, H-sections or roll formed sections may be substituted for pipe sections if acceptable to the Owner's Representative. Gate location shall be approved by Owner's Representative.
 - 1. The Contractor shall furnish and install a construction gate equipped with suitable locks and other hardware where necessary to provide access for construction apparatus or fire-fighting equipment.

2.2 TREE PROTECTION FENCE

- A. Tree Protection Fence: 8 foot high new chain link fence with posts installed in automobile rims with tires.

2.3 TREE PRUNING EQUIPMENT

- A. Equipment necessary for this work shall be properly maintained and in good operating condition. Remove and replace any equipment deemed to be in unsatisfactory repair or condition or otherwise unsuitable.

PART 3 - EXECUTION

3.1 STAKING OUT PROJECT COMPONENTS

- A. All lines and grades not presently established at the site shall be laid out by the Contractor in accordance with the Drawings. Maintain all established bounds and benchmarks and replace as directed any which are destroyed or disturbed.
- B. Prior to starting any construction work, stake out all limits of proposed paving and surfacing. Promptly upon completion of layout work and before any other construction work is begun on the site, notify the Owner's Representative, who shall conduct a field inspection of the stake-out.

3.2 PROTECTION OF EXISTING TREES

- A. Protect all trees to remain in the construction area as indicated on the Drawings or as directed in the field. Install tree protection fencing with posts spaced not more than 6 feet on center. Connect posts with top and bottom rails and corner braces well secured to posts. Erect fencing prior to any construction or excavation work. Maintain protection in place throughout the duration of construction operations. Remove when approved by Owner's Representative.
- B. The Contractor shall make every effort not to damage existing plant materials to remain. Place additional tree protection at other locations where trees may be jeopardized by construction activities. The Director of Urban Forestry shall approve location of tree fencing in the field.
- C. Damage no plants to remain by burning, by pumping of water, by cutting live roots or branches, or by any other means. Plants to be saved shall NOT be used for crane stay, guys or other fastenings. Vehicles shall not be parked within the dripline or where damage may result to trees to be saved. Construction materials shall not be stored beneath the leaf canopy of trees to be saved.
- D. Protection of vegetation shall remain in place and be maintained in working condition by the Contractor until directed for removal by the Owner's Representative and the Director of Urban Forestry. Tree protection devices shall be removed from the site by the Contractor just prior to spreading of screened loam under Section 32 90 00 LAWNS AND PLANTING, herein, or as directed in the field by the Owner's Representative.
- E. Existing trees to be saved within or outside the Contract Limit Line which have, in the opinion of the Owner's Representative or the Director of Urban Forestry, become damaged, shall be assessed at \$1000 per caliper inch and deducted from the Contract Amount. The Contractor shall pay all expenses incurred without additional cost to the Owner. These plants shall be removed, according to the Specification requirements for removals, the stumps grubbed out and removed, and the ground surface repaired. Costs for this removal shall be borne by the Contractor and shall not be included as part of the above schedule.

3.3 PRUNING OF EXISTING TREES

- A. Perform the actual pruning only during periods within the season which are normal for such work as determined by weather conditions and by accepted practice in this locality. Use experienced personnel to perform pruning.
 - 1. Do not prune trees susceptible to serious infectious diseases at the time of year during which pathogens causing the diseases or the insect vectors are most active. If pruning wounds may attract harmful insects, time pruning so as to avoid insect infestation.

2. On trees known to be diseased, disinfect tools with alcohol after each cut between trees and where there is known to be danger of transmitting the disease on tools.
 3. Do not prune Maples during the months of March or April.
- B. Perform all pruning in a manner which maintains the natural aesthetic characteristics of the species and variety of trees. No topping or dehorning of trees or stubbing back of branches shall be permitted. All cuts shall be made to a lateral branch a minimum of one third the size of the branch being removed unless otherwise instructed.
- C. Provide Hazard Reduction and Maintenance Pruning consisting of Crown Thinning and Crown Cleaning in accordance with ANSI Standard A300. Remove limbs, branches and stubs larger than 1 inch in diameter throughout the tree that are dead, dying, diseased, decayed, interfering, objectionable, obstructing, low hanging, storm damaged, broken, weak, potentially detrimental to the health of the tree and/or dangerous to pedestrians, and all suckers. Also moderately thin, lighten and cut back heavy areas of the tree to lessen wind resistance and where necessary for the future shape and development of the tree, and to preserve the natural character of the tree. Provide additional pruning as noted on the Drawings and as directed by Landscape Architect.
1. An occasional branch up to two inches in diameter may remain.
 2. Lateral branches as well as occasional branch suckers may be retained.
 3. Remove the weaker or less desirable of crossed or rubbing branches. Do not leave large open spaces in the general outline of the tree with such removal.
 4. Report the presence of any structural weakness, disease conditions, decayed trunk or branches, split crotch or branches in writing to the Landscape Architect. If the Contractor discovers tree(s) which have been designated for pruning, but whose condition is such that removal is warranted, such tree(s) shall not be pruned. Report these findings in writing to the Landscape Architect before any work is done on the tree(s) in question and proceed with work only upon instruction from Landscape Architect.
- D. Make all pruning cuts sufficiently close to the trunk or parent limb without cutting into the branch collar or leaving protruding stub, so that wound closure can readily start under normal conditions. Bark at the edge of all pruning cuts should remain firmly attached.
1. Precut all branches over 2 inches in diameter or too large to support with one hand. Use ropes or other equipment to lower large branches or stubs to the ground.
 2. Complete removal of secondary laterals and branch suckers resulting in the stripping of major limbs (turkey tailing) will not be permitted.
 3. Slab cuts or rip cuts will result in immediate termination of work.
 4. Remove all cut limbs from the crown upon completion of pruning.
- E. Pruning shall include provision for proper clearance from all luminaires and proper elevation over street and sidewalk surfaces to the following minimum requirements:
1. Luminaires: Remove branches extending directly below street luminaires that limit light from reaching the street or path below. Cut back all branches to afford a minimum of 4 foot clearance on all sides of luminaires.
 2. Streets: Remove all branches to allow a minimum clearance of 15 feet over street surfaces unless determined otherwise in the field by the Landscape Architect.
 3. Sidewalks: Remove all branches to allow a minimum clearance of 8 feet over path surfaces.
- F. Inspect old injuries. Bark trace those not closing properly and where the callus growth is not already established if the bark appears loose or damaged.
- G. Report in writing to the Landscape Architect the presence of any disease condition, fungus fruit bodies, decayed trunk or branches, split crotches or branches, cracks or other structural weakness.

- H. Do not use equipment that will damage the bark or cambium layer in or on the tree. The use of climbing spurs or spiked shoes is not acceptable for pruning operations on live trees. Use of these spurs or shoes will result in immediate termination of work.
- I. Use only clean sharp tools. Disinfect tools with alcohol when working on trees known to be diseased, particularly when there is known danger of transmitting the disease on tools. Disinfect after each cut between trees.
- J. At the end of each working day completely remove all wood, brush and resulting debris from the site. Sweep areas clean of all material related to the work operation.

3.4 GENERAL REMOVALS

- A. Within the actual construction area all existing obstructions such as pavement, foundations, footings, and the like which are shown to be abandoned shall be removed to their full depth below final finish grade.
 - 1. The use of explosives will not be permitted.
 - 2. At the Owner's discretion, certain obstructions may not be removed to full depth if removal, in the Owner's opinion, will negatively affect materials to remain.
- B. The Contractor shall be responsible for the methods used in this work including properly protecting against damage to all site improvements, utility lines, trees, etc. Check with the municipality and local utility companies for locations of all existing utilities which may be in use or abandoned. Investigate and ascertain that underground utilities are correctly located and that they have been shut off and/or abandoned before disturbing them.

3.5 TRANSITION FROM EXISTING TO NEW WORK

- A. When new work abuts or finishes flush with existing work, make a smooth and workmanlike transition from existing to new. Patched work shall match existing adjacent work in texture and appearance so that the patch or transition is invisible at a distance of 5 feet.

3.6 SALVAGE

- A. The Owner retains the first right of refusal of anything found on the site.

3.7 EROSION CONTROL

- A. It shall be the responsibility of the Contractor to render the site erosion free. Approval by Owner's Representative of any method to accomplish this does not relieve the Contractor of full responsibility for controlling erosion and/or sedimentation throughout the construction process.

3.8 DUST CONTROL

- A. Maintain all excavations, embankments, stockpiles, plant sites, borrow areas and all other work areas within or without the project boundaries free from dust which would cause the standards for air pollution to be exceeded or cause a hazard or nuisance to others. Approved temporary methods of stabilization consisting of sprinklered water or similar methods will be permitted to control dust. Do not use oil or similar penetrants. Sprinkling must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor must have sufficient competent equipment on the job to accomplish this if sprinkling is used. Perform dust control as the work proceeds and whenever a dust nuisance or hazard occurs.

3.9 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from site debris, rubbish and other materials resulting from selective demolition operations. Burning of removed materials will not be permitted on site. Transport materials removed from demolition operations and legally dispose off-site.

PART 4 - COMPENSATION

4.1 METHOD OF PAYMENT

- A. Tree Protection will be per lump sum. Approximate locations of tree protection are shown on the Drawings and shall be approved in the field by the Owner's Representative.
- B. Tree Pruning will be measured at the contract unit price per lump sum. Locations of tree pruning are shown on the Drawings and shall be approved in the field by the Owner's Representative.
- C. Mulch Removal and Disposal will be measured at the contract unit price per cubic yard to the limits as directed by the Owner's Representative and as specified herein.
- D. Double Timber Edge removal and disposal will be measured at the contract unit price per linear foot complete and as specified and as directed by the Owner's Representative and as specified herein.
- E. Play Equipment removal and disposal, including removal of concrete footings to a 2' minimum depth below new finish grade, will be measured at the contract unit price per lump sum to the limits as directed by the Owner's Representative and as specified herein.
- F. 4' ht. Chain Link Fence removal and disposal, including removal of concrete footings will be measured at the contract unit price per linear foot to the limits as directed by the Owner's Representative and as specified herein.
- G. Temporary Construction Fence including setup and removal will be paid for at the contract unit price per linear foot. Location for temporary construction fence shall be as shown on the Drawings.
- H. Bituminous Concrete Paving removal and disposal will be measured at the contract unit price per square foot. Removal of paving will also include removal of any gravel base course.

4.2 PAYMENT ITEMS

Item 3	Tree Protection Fence -	Lump Sum
Item 4	Tree Pruning -	Lump Sum
Item 5	Mulch Surface removal and disposal -	Cubic Yard
Item 6	Double Timber Edge removal and disposal -	Linear Foot
Item 7	Ex. Play Equipment removal and disposal -	Lump Sum
Item 8	Ex. 4' Chain Link Fence removal and disposal -	Linear Foot
Item 9	Temporary Construction 8' Fence - set up and removal -	Linear Foot
Item 10	Bit. Conc. Paving removal and disposal -	Square Foot

END OF SECTION

02 41 13

SECTION 31 00 00 – EARTHWORK

Item 11	Strip and Stockpile Topsoil -	Cubic Yard
Item 12	Excavation, Removal and Disposal of all unsuitable and surplus excavated materials from site-	Cubic Yard
Item 13	Excavation, Backfilling, Compacting and Decompacting -	Cubic Yard

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Provide all equipment and materials, and do all work necessary to complete the earthwork which includes, but is not limited to the following:
 - 1. Topsoil stripping and stockpiling.
 - 2. Excavating, filling, backfilling and grading as specified herein, as shown on the Drawings or as required for site improvements and other site work.
 - 3. Preparation of subgrade for pavements and landscaping.
 - 4. Protecting all existing structures, utilities, pavements, planting and other site improvements from damage due to construction.
 - 5. Performing all drainage and dewatering as necessary to maintain excavated areas free from water from any source and to perform work 'in-the-dry'.
 - 6. Placement and compaction of fills.
 - 7. Excavation, Removal and disposing of all unsuitable and surplus excavated materials from the site.
 - 8. Compaction and decompaction procedures.
 - 9. Dust, erosion and sedimentation control.

1.2 RELATED WORK

- A. The following items of related work are specified and included in other Sections of the Specifications:
 - 1. Section 02 41 13 - Selective Site Demolition
 - 2. Section 32 10 00 - Bases, Ballasts, Paving and Curbing
 - 3. Section 32 30 00 - Site Improvements
 - 4. Section 32 90 00 - Lawns and Planting

1.3 REFERENCES

- A. AASHTO: American Association of State Highway and Transportation Officials.
- B. ANSI A10 Series standards: American National Standards Institute, "Safety Requirements for Construction and Demolition".
- C. ASTM: American Society of Testing Materials.
- D. MassDOT: "Standard Specifications for Highways and Bridges", Massachusetts Department of Transportation, latest edition.

1.4 QUALITY ASSURANCE

- A. Comply with all codes, laws, ordinances and regulations of governmental authorities having jurisdiction over this part of the work.
- B. Provide protection for all persons and property in accordance with ANSI/NFPA 241, Building Construction and Demolition Operations. Execute all work in such a manner as to protect existing buildings, streets,

curbs, paving, utility lines, structures, fences and adjoining property from damage by equipment, settlement, undermining, washout, frost and other hazards created by earthwork operations.

1.5 TESTING SERVICES

- A. The testing laboratory will be responsible for conducting and interpreting tests, state in each report whether or not the test specimens conform to all requirements of the Contract Documents and specifically note any deviation there from. Specific test and inspection requirements shall be as specified herein.

1.6 SUBMITTALS

- A. Test Reports:
 - 1. Gradation tests for all soil materials.
 - 2. Optimum moisture - maximum density of soils.
 - 3. Field density compaction tests.

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect and handle manufactured materials during loading, shipping, unloading at the site, storage and erection as required to prevent damage.

1.8 BENCH MARKS AND ENGINEERING

- A. Line and grade work in accordance with the Drawings and Specifications shall be laid out by a registered Civil Engineer or Land Surveyor employed by the Contractor. Establish permanent bench marks, as required, to which access can be easily had during the progress of the work. Maintain all established bounds and bench marks and replace as directed any which are disturbed or destroyed. Establish lines and grades in conformity with the Drawings. Provide sufficient grade stakes to witness correct lines and grades.
- B. Verify dimensions and elevations on the ground and report any discrepancies immediately to the Owner's Representative. Any discrepancies not reported prior to construction shall not be the basis for claims for extra compensation.
- C. The Drawings indicate, in general, alignment and finish grade elevations. The Owner's Representative, however, may make such adjustments in grades and alignments as are found necessary in order to avoid interference with any special conditions encountered.

1.9 DEFINITIONS

- A. Fill and backfill shall be, for the purpose of this Specification, considered interchangeable terms and shall mean material to be used to bring existing or construction grades up to finish subgrade levels.
- B. The word "excavation" consists of the removal of material encountered to subgrade elevations and the reuse or disposal of materials removed.
- C. The words "finish grade" as used herein mean the required final grade elevations indicated on the Drawings. Where not otherwise directed, areas outside buildings shall be given uniform slopes between points for which finish grades are shown, or between such point and existing grade, except that vertical curves or roundings shall be provided at abrupt changes in slope.
- D. The word "subgrade" as used herein, means the required surface of subsoil, borrow fill or compacted fill. This surface is immediately beneath the site improvements, specially dimensioned fill, paving, loam or other surfacing materials.

- E. "Trench" shall be defined as an excavation of any length where the width is less than twice the depth. All other excavations shall be classified as open.
- F. "Unsuitable Materials" shall include the following:
 1. Pavements, utility structures, building foundations and other manmade structures.
 2. Peat, muck, organic silt, and other organic materials subject to decomposition, consolidation or decay.
 3. Miscellaneous fill including cinders, ash, glass, wood, masonry and metal.
 4. Ledge and boulders.

1.10 EXISTING CONDITIONS

- A. Subsurface Information: The Owner's Representative assumes no responsibility for the Contractor's failure to make his own site investigation and makes no representation regarding the character of the soil or subsurface conditions which may be encountered during the performance of the work. Bidders are expected to examine the site and then decide for themselves the character of materials to be encountered.
- B. Existing Utilities
 1. Before starting earthwork, locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.
 2. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility Owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of Owner.
 3. Do not interrupt existing utilities serving facilities occupied or used by Owner and others, during occupied hours, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided. Provide minimum of 48 hour notice to Owner, and receive written notice to proceed before interrupting any utility.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. GRANULAR FILL shall conform to the requirements of Section M1.03.0 of MassDOT and the following gradation specifications for percentage passing by weight for each type of granular fill.

Sieve Size	Granular Fill
8"	100
3"	70-100
1/2"	40-100
No. 4	25-100
No. 10	15-95
No. 40	10-70
No. 200	0-12

1. Material from excavation on the site meeting the above requirements may be used as the granular fills above provided it meets gradation requirements and has not been contaminated with unsuitable material.
- B. GRAVEL shall be dense graded crushed stone conforming to the requirements of Section M2.01.7 of MassDOT.
 1. The composite material shall be free from clay, loam or other plastic material and shall conform to the following grading requirements:

Sieve Designation	Percentage by Mass Passing Square Mesh Sieves
-------------------	-----------------------------------------------

2 in.	100
1 ½ in.	70-100
¾ in.	50-85
No. 4	30-55
No. 50	8-24
No. 200	3-10

2. Sampling and testing shall be in accordance with the following standard AASHP methods:

Sieve Analysis	T27
Passing 75 um	T11

2.2 USE OF FILL MATERIALS

- A. Granular Fill shall be utilized as fill in the following locations, as required:
 1. To replace unsuitable material.
 2. In all walk embankments to subgrade.
 3. Elsewhere as shown on the Drawings or specified.
- B. Gravel shall be utilized as sub-base material for all walk and paving surfaces, where so indicated on the Drawings or specified herein.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, pavements and other facilities from damage by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
- B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.
- C. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil bearing water runoff or airborne dust to adjacent properties and pavements.
 1. It shall be the responsibility of the Contractor to render the site erosion free. Approval by Owner's Representative of any method to accomplish this does not relieve the Contractor of full responsibility for controlling erosion and/or sedimentation throughout the construction process.
 2. Employ all methods and/or materials required to effectively control dust created by this work using sprinklered water or other approved means. Do not use oil or similar penetrants.

3.2 EXCAVATION

- A. Excavation is "Unclassified", and includes excavation to subgrade elevations indicated, or required to accommodate new construction, regardless of character of materials and obstructions encountered and shall be understood to include rock, shale, boulders, earth, hardpan, fill, foundations, pavements, curbs, piping and debris. It shall include the removal of all rubble, debris, foundations, pavement, utilities and appurtenances to two (2) feet minimum below finish grade.
- B. Before any other work is begun in this Section, strip topsoil to its entire depth from areas to be occupied by paved areas, utilities or any areas where the existing grade is to be changed. Strip topsoil free of subsoil, clay, large stones and debris. Do not damage roots of trees that are to remain during topsoil stripping. When excavating or trenching within the branch spread of trees scheduled to remain, do so in a manner that will cause minimum damage to root systems. Do not cut tree roots over 2 inches in diameter. Do not leave surface roots exposed. Prune injured roots clean and backfill as soon as possible.

1. Pile topsoil separately from all other material in locations on the site approved by the Owner and authorities having jurisdiction, and preserve for finish grading and lawn operations specified under Section 32 90 00. Place, grade and shape stockpile for proper drainage.
 2. Do not remove topsoil from the site without written permission of Owner. Remove excess topsoil not required for operations specified under Section 32 90 00 from the site only after receiving written permission from Owner.
 3. All topsoil shall remain the property of the Owner and shall not be removed from the site.
- C. Excavate to the following basic subgrades:
1. Footings and other site improvements: To exact elevations required.
 2. Paving: To elevations indicated on the Drawings.
- D. Unauthorized Excavation: When suitable bearing material is encountered at subgrade elevations shown and excavation is made to greater depth, bring grade back to elevation required by providing granular fill at no additional cost to the City.
- E. Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.
- F. Dewatering: Prevent water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area.
1. Do not allow water to accumulate in the excavations. Remove water to prevent softening of foundation bottoms, undercutting footings and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
 2. Establish and maintain temporary drainage ditches and their diversions outside excavation limits to convey rain water and water removed from excavations to collecting or runoff areas. Do not use trench excavations as temporary drainage ditches. The disposal of water from excavations shall not cause damage to adjacent property and shall be in compliance with all applicable laws and regulations, in particular, those related to protection of water resources and other environmental features.
 3. Keep the water level in areas being compacted at least two (2) feet below the level at which compaction is being done at all times.
- G. Material Storage: Stockpile satisfactory excavated materials where directed until required for backfill or fill. Contractor shall place, grade and shape stockpiles for proper drainage. Do not store or place material stockpiles within the drip line of trees to remain.
- H. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10 feet, and extending a sufficient distance from footings and foundations to permit placing and removal of formwork, installation of services, other construction and for inspection.
- I. Frost Protection:
1. Make no excavations to full depth indicated when freezing temperature may be expected unless intended improvements can be accomplished immediately after the excavations have been completed. Protect bottom so excavated from frost if progress is delayed. Protect the subgrade of in place footings from frost. Should protection fail remove frozen materials and replace with concrete or granular fill as directed at no cost to the City.
 2. Keep the site clear and free of accumulations of snow within the limit of the Contract lines as necessary to carry out the work of the Contract.
 3. Fill materials containing frost shall not be utilized, nor shall filling be done over frozen material.
 4. Protect the underside of all in place construction from frost penetration during the construction period of this Contract. Such protection shall include all in place footings and slabs, during all periods of freezing

temperatures until such time as the entire project is complete. Minimum frost protection shall consist of a 4 foot thickness of earth, or equivalent in insulating properties.

3.3 BACKFILL AND FILL

- A. Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below.
 - 1. Under pavements: Use granular fill material, satisfactory excavated or borrow material, or combination of both.
 - 2. Under lawn areas: Use satisfactory excavated or borrow material.
- B. Backfill excavations as promptly as work permits, but not until completion of the following:
 - 1. Acceptance of construction below finish grade.
 - 2. Backfilling of voids with satisfactory materials.
- C. Placement and Compaction: Place backfill and fill materials in uniform lifts of not more than 12 inches in loose depth for ordinary fill and 8 inches in loose depth for other materials compacted by heavy compaction equipment, and not more than 6 inches in loose depth for material compacted by hand operated mechanical compactors.
 - 1. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification.
 - 2. Place backfill and fill materials adjacent to structures, piping or conduit evenly to required elevations. Take care to prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping or conduit to approximately the same elevation in each lift.
 - 3. Do not place any fill material until structural components involved have sufficient strength to withstand the pressure to be imposed. Remove from spaces to be filled all unstable material, including all rubbish, trash, refuse and other debris.
 - 4. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
 - 5. Coordinate backfilling with the installation of the work of all trades.
 - 6. Compact backfill to match adjacent areas as specified above. Correct settlement of fill by filling to subgrade levels in all areas where settlement occurs.

3.4 DECOMPACTION OF SOILS

- A. General:
 - 1. All existing in-place soil within the limit of new lawn turf and new tree plantings that has been subject to compaction, vehicular traffic, equipment storage or material stockpiling prior to and during the performance of this Contract shall be deep ripped to a depth of 12 inches in accordance with the requirements of this Specification.
- B. Decompaction Operations:
 - 1. Vertically fracture all exposed subsoil material in specified areas as noted above within the Limits of Work through deep turnover and ripping, decompaction, restoring soil porosity and permeability and aiding infiltration and reducing runoff. Fracture the subsoil to a depth of 12 inches.
 - 2. Effective fracturing of compressed subsoil material is achieved only when the soil material is moderately dry to moderately moist. Perform subsoiling only when soil has suitable moisture content as described in this Specification.
 - 3. Contractor shall take care to stage operations of loam placement so that newly placed soils are not compacted after placement. Contractor shall demonstrate that his/her protocols for re-spreading topsoil will not cause extensive compaction.

3.5 SUBGRADE PREPARATION AND GRAVEL PLACEMENT FOR PAVEMENTS

- A. Clean the rough subgrade of all loose, soft, foreign or other unsuitable material and reshape as required. Add suitable fill material to meet required grade.
- B. Compact to required grades and sections for paving. Remove spongy or otherwise unsuitable material and replace with approved material. Loosen exceptionally hard spots and recompact. Take every precaution to obtain a foundation of uniform bearing power. In absence of specific requirement, compact foundation by such means as will provide firm base and insurance against settlement of superimposed work.
- C. Roll with wheeled roller having a weight per inch of width not less than 400 pounds. Begin rolling longitudinally at sides, overlapping each pass by one-half of rear wheel. Fill all depressions or settlements which occur. Continue until all stones are firmly interlocked and surface is true and unyielding. Compaction shall be in accordance with these Specifications. After final rolling, surface is to be free of depressions or irregularities greater than 3/8 inch in 10 feet.
- D. Construct base course as detailed on the Drawings for all areas of new paved surfaces in this Section. Placement of gravel base course shall conform to the requirements of MassDOT except as herein modified.
- E. Spread gravel from self-spreading vehicles, approved type of power grader or by hand upon prepared subgrade. Spread evenly in layers so as to avoid separation of aggregates. Layers shall not exceed 6 inches in depth after compaction. Remove stones larger than 3 inches. When spread and rolled on the prepared surface, it shall form a stable surface. Compaction shall have a density of not less than 95% of maximum density determined in accordance with AASHTO-T-180 Method D. All rolling shall be done with a roller weighing 8 to 10 tons. Compact any portion which is not accessible to a roller by mechanical or hand tamper.
- F. Final rolled surface shall be true to the lines and grades indicated on the Drawings or as directed by the Owner's Representative. Fill any depression that may appear during and after rolling the gravel and re-roll until the surface is true and even. Tolerance shall be 3/8 inch maximum above or below the cross-section grades and 3/8 inch maximum under a 10 foot line longitudinally.
- G. Maintain the surface of any layer in its finished condition until succeeding layer is placed. Properly drain the subbase at all times.

3.6 COMPACTION

- A. Control soil compaction during construction providing minimum percentage density specified for each area classification.
- B. Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density of soils which exhibit a well-defined moisture density relationship determined in accordance with ASTM D1557, Method C.
 - 1. Pavements and Slabs: Compact top 12 inches of subgrade and each layer of backfill or fill material at 95 percent maximum density.
 - 2. Lawn or Unpaved Areas: Compact top 6 inches of subgrade and each layer of backfill or fill material at 85 percent maximum density.
 - 3. Footings: Compact circumference of subgrade material around new footing at 95 percent maximum density.
- C. Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil material, to prevent free water from appearing on surface during or subsequent to compaction operations.
 - 1. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

2. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to satisfactory value.
3. If native soils become saturated and unstable during subgrade preparation operations stabilize the subgrade with filter fabric and crushed stone as necessary.
4. Do not place backfill or fill material on surfaces that are muddy, frozen or contain frost or ice.

3.7 GRADING

- A. Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades.
- B. Grade areas to drain away from structures and to prevent ponding. Finish surfaces free from irregular surface changes, and as follows:
 1. Lawns or unpaved areas: Finish areas to receive topsoil to within not more than 0.10 foot above or below required subgrade elevations.
 2. Paved areas: Shape surface of areas under paved surfaces to line, grade and cross section, with finish surface not more than 0.10 foot above or below required subgrade elevations.
- C. Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.
- D. Do all cutting, filling, re-shaping, re-grading and re-compacting as necessary to meet the requirements of the Drawings and this Section of the Specifications. Maintain subgrades at the levels specified until turned over to subsequent construction. Bring to required subgrade levels any areas where settlement, erosion or other grade changes occur.

3.8 PROTECTION AND REPAIR

- A. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances.
- C. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.
- D. Settlement: Where settling is measurable or observable, remove surface improvement [if any], excavate and remove soft material, provide fill material, compact properly and replace surface improvement [if any]. Restore appearance to eliminate evidence of patching or repair.

3.9 FIELD QUALITY CONTROL

- A. Quality Control Testing During Construction: Allow testing service to inspect and approve subgrades and fill layers before further construction work is performed.
- B. If in the opinion of the Owner, based on testing service reports and inspection, subgrade of fills which have been placed are below specified density, Contractor shall provide additional compaction and testing at no additional expense.
- C. When testing laboratory reports that subgrades, fills or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depths required, recompact and retest until required density is obtained.

3.10 TESTS

- A. Testing laboratory will perform the following general services:
 - 1. Determine maximum dry density and optimum moisture content of soils in accordance with standards herein before specified.
 - 2. Provide optimum moisture - maximum density curves for undisturbed soil used for bearing and material used for compacted fill.
 - 3. Test and approve all subgrades and compacted fill layers before construction thereon.
- B. Testing laboratory will perform the following field tests:
 - 1. Perform field in place density tests according to ASTM D1556 [sand cone method], ASTM D2167 [rubber balloon method] or ASTM D2937 [drive cylinder method] as applicable.
 - a. Field in place density tests may also be performed by the nuclear method according to ASTM D2922, provided that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D1556. With each density calibration check, check the calibration curves furnished with the moisture gages according to ASTM D3017.
 - b. When field in place density tests are performed using nuclear methods, make calibration checks of both density and moisture gages at beginning of work, on each different type of material encountered, and at intervals as directed by Owner's Representative.
 - 2. Paved Areas: At subgrade and at each compacted fill and backfill layer, perform at least one field in place density test for every 1,000 square feet or less of paved area, but in no case fewer than three tests.
- C. When testing laboratory reports that subgrades, fills or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depths required, recompact and retest until required density is obtained.

PART 4 – COMPENSATION

4.1 MEASUREMENT

- A. Excavation, where not included as part of or incidental to other items of work, will be measured in its original position by the cross section method, except that where such measurement is impracticable the volume shall be measured by such other methods as the Owner's Representative may determine.

4.2 BASIS OF PAYMENT – All payments shall include full compensation for all labor, tools, equipment, and all incidental work necessary to complete the work under these items as shown on the Drawings, as directed by the Owner's Representative, and as specified.

- A. Excavation items will be paid for at the Contract Unit Price per cubic yard which shall include all labor and equipment necessary for:
 - 1. Stripping and stockpiling topsoil for further on site use.
 - 2. Excavating and backfilling reuseable material.
 - 3. Excavating and disposing of unsuitable or excess material.
 - 4. Grading and compacting the subgrade as herein specified or as directed.
 - 5. Decompacting soils as herein specified or as directed.
 - 6. Trenching.
- B. Gravel will not be paid for in this Section, but will be paid for as part of other payment items in other Sections.
- C. Incidental earthwork and earthwork materials as part of other payment items in other Sections will not be paid for as a separate item, but rather as part of the payment items listed below

4.3 PAYMENT ITEMS

Item 11	Strip and Stockpile Topsoil	Cubic Yard
Item 12	Excavation, Removing and Disposing of all unsuitable and surplus	Cubic Yard

Item 13	excavated materials from site - Excavation, Backfilling, Grading, Compacting and Decompacting -	Cubic Yard
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END OF SECTION
31 00 00

SECTION 32 10 00 – BASES, BALLASTS, PAVING AND CURBING

- Item 14 Bituminous Concrete Walk Paving -**
- Item 15 Resilient Safety Surface -**
- Item 16 Concrete Walk Paving -**
- Item 17 Straight Precast Concrete Curb -**

Square Yard
Square Foot
Square Foot
Linear Foot

PART 1 - GENERAL

1.1 REFERENCE

- A. Attention is directed to the printed form of the Contract, General Conditions, Supplementary General Conditions and Division 1 of which these specifications are hereby made a part.

1.2 SECTION INCLUDES

- A. Bituminous Concrete Walk Paving
- B. Resilient Safety Surface
- C. Concrete Walk Paving
- D. Precast Concrete Curb

1.3 RELATED WORK

- A. Section 02 41 13 - Selective Site Demolition
- B. Section 31 00 00 - Earthwork

1.4 REFERENCES

- A. AASHTO: American Association of State Highway and Transportation Officials
- B. ACI: American Concrete Institute
- C. ADA: Americans with Disability Act
- D. ASTM: American Society for Testing and Materials
- E. CPSC Handbook for Public Playground Safety National Bureau of Standards, for the U.S. Consumer Product Safety Commission. 8th and Final Draft, Volumes I & II
- F. MassDOT: "Standard Specifications for Highways and Bridges", Massachusetts Department of Transportation, latest edition
- G. PCI: Precast/Prestressed Concrete Institute

1.5 QUALITY ASSURANCE

- A. Paving on public property shall comply with all laws, rules and regulations of governmental authorities having jurisdiction over such work.
- B. It shall be the responsibility of the Contractor to render the site erosion free. Approval by Owner's Representative of any method to accomplish this does not relieve the Contractor of full responsibility for controlling erosion and/or sedimentation throughout the construction process.
- C. Construction Tolerances:
 - 1. Variations from slope as indicated for finished surface of paving: 1/4 inch in 10 feet.
- D. Precast Quality Control:

1. Fabricator must be designated a PCI Certified Plant for Group A1 - Architectural Concrete.
2. Quality Control Testing: test and inspect precast concrete as determined by Owner's Representative, according to MNL-117 requirements.
3. Strength of precast concrete units will be considered deficient when they fail to comply with ACI 318 [ACI 318M] requirements.
4. Defective Work: Discard precast concrete units that do not conform to requirements including strength, manufacturing tolerances and finishes. Replace with precast concrete units that meet requirements.
5. Precast design modifications may be made only as necessary to meet field conditions and to insure proper fitting of the work and only as acceptable to Owner's Representative. Maintain general design concept shown without increasing or decreasing sizes of members or altering profiles and alignment shown.
6. Installer Qualifications: Engage an experienced Installer who has completed similar architectural precast concrete work similar in material, design and extent to that indicated for this project and with a record of successful in-service performance.
7. Do not change source of brands for precast concrete or setting materials during progress of work.

- E. **HANDICAP ACCESSIBILITY:** When installed, all paving shall be handicap accessible and will comply with the Civil Rights Restoration Act of 1987 and the Americans with Disabilities Act of 1990, latest version.

1.6 TESTING LABORATORY SERVICE

- A. The testing laboratory will be responsible for conducting and interpreting tests. Each report shall state whether or not the test specimens conform to all requirements of the Contract Documents and will specifically note any deviation there from if any. Specific test and inspection requirements shall be as specified herein.

1.7 SUBMITTALS

- A. **Samples:** Prior to ordering the below listed materials, submit representative samples to Owner's Representative for selection and approval. Do not order materials until Owner's approval has been obtained. Delivered materials shall closely match the approved samples.
- B. Mix designs and supporting test data for asphaltic mixtures.
- C. Report on tests of in place construction of top and bottom courses of bituminous pavements.
- D. **Resilient Safety Surface Submittals:** Submit copies of testing procedures and results, performed by independent testing source, which demonstrates compliance with CPSC and ASTM guidelines. Per CPSC and ASTM F1292-91, critical height testing procedures at 30, 71 and 120 degrees Fahrenheit, the installed surface shall pass the 200 G-max and 1000 HIC (Head Injury Criteria) test for a height at least equal to the highest fall height of equipment as installed within its zone. Rubber surface thickness to be calculated based on 'hard' base, not aggregate base.
1. Submit manufacturer's product data and full range of color samples for selection and approval by Owner's Representative.
- E. **Resilient Playground Safety Surface Installer Qualifications:** Minimum of five years of experience installing resilient playground surfacing. Installer must provide Owner with 3 local references where installation can be inspected.
- F. **SHOP DRAWINGS** for precast concrete work. Include in the drawings sizes, shapes, finishes and location of all precast materials. Include in Drawing any reinforcing, bedding, anchoring and jointing of all dimension work, relations to adjacent construction, relations to work of other trades, and all other details required for the proper installation of the work with due reference to all related work. Include locations and details of hoisting points and lifting devices for handling and erection. Contractor shall verify and take all

necessary field measurements prior to fabrication. Do not fabricate or install any items until shop drawings have been approved.

1. SAMPLE for verification purposes: 1 precast concrete curb sample approximately 6 inches in length to illustrate quality, color and texture of surface finishes.

G. Concrete design mix including report on design strength test.

1. Test reports on placed concrete:
 - a. Tests of materials, or review of test reports available from suppliers.
 - b. Field tests as specified herein.

H. Compaction Tests

1. Submit two compaction tests of prepared gravel subbase to Owner's Representative for evaluation before proceeding with final pavement.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Install bituminous concrete pavement in accordance with temperature and weather limitations specified by MassDOT.
- B. Install resilient playground safety surfacing in accordance with temperature and weather limitations provided by synthetic resilient surfacing manufacturer. Store all materials protected from the weather and at temperature not less than 40° F.

1. Apply resilient playground surfacing only to clean, dry and properly prepared surfaces.

1.9 PRODUCT DELIVERY

- A. Deliver precast concrete curbing units to project site in such quantities and at such times to assure continuity of installation. Store units at project site to prevent cracking, distortion, warping, staining or other physical damage and so that markings are visible. Lift and support units only at designated lifting or supporting points.

1.10 COLD WEATHER PROTECTION

- A. Do not erect or clean any precast curb units when the temperature of surrounding area is below 40 degrees F., or below 45 degrees F. and falling, or forecast by public news media to fall to or below 35 degrees F. within 24 hours without temporary heated enclosures or without heating materials or other precautions necessary to prevent freezing. Minimum temperature within heated enclosure shall be 40 degrees F. Do not use materials which are likely to contain frost. Do not use accelerating ingredients with any mortar. Do not use anti-freeze compounds to lower the freezing point of mortar. Mortar shall harden without freezing and with no damage from frost. Protect all work against freezing for not less than 48 hours after installation.
- B. Do not lay precast curb units which are wet or frozen. Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen setting beds. Remove any ice or snow formed on masonry bed by carefully applying heat until top surface is dry to the touch. Remove and replace work damaged by frost or freezing.

PART 2 - MATERIALS

2.1 BITUMINOUS CONCRETE PAVEMENT

- A. Bituminous Concrete Pavement shall consist of binder course mix and dense binder mix courses constructed to the thicknesses shown on the Drawings and shall conform to the relevant provisions of Sections 460 and M3.11.03 of "Standard Specifications for Highways and Bridges" of MassDOT, latest edition.
- B. Base/Binder Courses shall be Bituminous Concrete Pavement, Dense Finish Course Type I-1.
- C. Leveling Courses
 - 1. Leveling Courses may conform to "Surface Treatment" mix, Table A, Section M3.11.03 of the MassDOT Standard Specifications, comprised of Class I Dense Bituminous Concrete, Type St or Dense mix Type I-1, at the contractor's option.
 - 2. The general composition of the bituminous concrete mixture (the proportion of asphalt cement to mineral aggregate) shall be in accordance with MassDOT requirements.
 - 3. The mineral aggregate composition for Type St shall be as follows:

TYPE ST SIEVE ANALYSIS U.S. Standard Sieve No.	MINERAL AGGREGATE Percent Passing by Weight (per ASTM C-136)	
Size	Minimum	Maximum
3/8	100	-
4	96	100
8	85	100
16	55	85
30	25	60
50	15	40
100	3	15
200	2	7

2.2 CONCRETE WALK PAVING

- A. CONCRETE MATERIALS
 - 1. Cement Concrete shall be of an air entrained type conforming to the current specifications of Section M4 of the Standard Specifications. Cement concrete shall have a 28 day compressive strength of 4000 PSI using 3/4 inch aggregate, and with an entrained air content of $7.0 \pm 1.0\%$.
 - 2. FINE AGGREGATE: conforming to Section M4.02.02 of MassDOT.
 - 3. COARSE AGGREGATE: conforming to Section M4.02.03 of MassDOT except that 3/4 inch shall be the maximum aggregate size.
 - 4. WATER: conforming to Section M4.02.04 of MassDOT.
 - 5. AIR ENTRAINING ADMIXTURE: conforming to ASTM C260.
 - 6. WATER REDUCING ADMIXTURE: conforming to ASTM C494, type A.
 - 7. ACCELERATING ADMIXTURES, CALCIUM CHLORIDE AND ANY OTHER ANTIFREEZE MATERIALS: NOT PERMITTED.
- B. CONCRETE PROPORTIONING, MIXING, STRENGTH AND QUALITY

1. Concrete shall conform to ASTM C94. The design strength of concrete shall be as follows:
 - a. 4,000 psi minimum at 28 days for above grade use.
2. All concrete exposed to weather shall be air entrained with a total air content of 5 to 8%.
3. Use no more water in the mixture than is necessary to produce concrete which is workable and plastic within the limits specified herein for slump. Use the least amount of water and proportion of mortar to coarse aggregate which will produce uniformly dense concrete, free from aggregate pockets or honeycomb. Make corrections for the amount of moisture contained in the aggregates. Make allowances for absorption of moisture by the aggregates during the period of mixing and handling. Maintain a continuous uniform consistency.
4. In all cases, provide concrete of such consistency and mix composition that it can be worked readily into the corners and angles of forms and around reinforcement, concrete inserts and castings without permitting the materials to segregate or free water to collect on the surface.
5. The consistency of the concrete at time of deposit as measured by ASTM C143 shall be as follows:

<u>Portion of Work</u>	<u>Slump</u>	
	<u>Recommended</u>	<u>Maximum Range</u>
Slabs on ground	2 inches	1-3 inches

2.3 RESILIENT SAFETY SURFACE

- A. The resilient safety surface shall be a poured in place system by one of the following manufacturers: “Playbound Poured-In Place System” by Surface America, Inc., Williamsville NY, 800-999-0555; or “Vitriturf” Playground System by Hanover Specialties Inc., Hauppauge NY, 631-231-1300 with the local area representative being Ulti-Play Parks and Playgrounds, Uxbridge MA, tel: 508-634-1497, or approved equal.
 1. Cushion course and wearing course components shall be provided by the same manufacturer.
 2. Playground surface shall meet or exceed current Consumer Product Safety Commission (CPSC) guidelines issued in ‘A Handbook for Public Playground Safety (latest edition)’ for a maximum fall height of 9’-0” at Play Equipment ‘B’; current Americans with Disabilities Act Guidelines (ADAG); and current American Society for Testing and Materials (ASTM) F-1292-91 requirements.
- B. CUSHION COURSE- shall be a monolithic poured-in place cushion pad made from a field-mix blend of SBR recycled rubber buffings adhered with a 100% solids polyurethane binder to form a resilient porous material. The rubber shall arrive at the site packed in suitable bags and protected from moisture during transportation and handling.
 1. SBR chopped to 1-3mm or 3/8" shredded granules and contain less than 4% dust
 2. Curing Time: Allow up to 24 hours. When the surface can be walked on without leaving depressions, it has cured enough to proceed with the installation of the Top Wearing Course.
- C. WEARING COURSE- shall be a monolithic poured-in place top surface made from a blend of ethylene propylene diene monomer (EPDM) colored rubber containing a minimum 20% EPDM and having a density of 1.50 +/- 0.05 and chopped to 1-3 mm size. The EPDM rubber granules shall be protected from moisture during transportation and handling.
 1. The rubber granules and binder are blended together at a ratio of 80/20 in a mechanical mixer until all the EPDM rubber granules are coated with aliphatic-based polyurethane binder. The blended material is then spread onto the cured cushion base and leveled to the proper elevation using gauge bars equal to the required thickness.
 2. Curing time: Allow 24 to 72 hours for curing. It is recommended to allow an additional 24 hours curing time prior to opening the area to play.

3. Finished surface shall be slip resistant; supply ASTM E303 slip characteristic test results.
4. Resilient surface material shall be ignition resistant; supply passing ASTM D2859 test results.
5. Color: A selection of up to three colors from the manufacturer's entire range of standard colors shall be made by the Owner's Representative.

D. **ALIPHATIC BINDER:** The binder for the synthetic resilient playground top wearing course shall be an MDI based one component, aliphatic-based binding agent. The binder shall be free of TDI Monomers. The binder must be clear in color and solvent free. The binder shall be specially formulated for compatibility with SBR and EPDM rubber granules. Specific gravity for the binder shall be 1.07 +/- 0.03. **AROMATIC BINDERS ARE NOT ALLOWED.**

E. **PRIMER:** Single component moisture cured polyurethane primer.

F. **CRUSHED STONE BASE:**

<u>Sieve Size</u>	<u>% Passing by Weight</u>
1"	90-100
5/8"	50-80
1/4"	30-50
#4	15-35
#8	10-30
#30	3-5
#200	0-3

1. The crushed stone must be compacted to a 95% Standard Proctor Compaction. The crushed stone shall be a homogeneous mixture complying with the chart above.

2.4 RESILIENT SURFACE MIXTURE COMPOSITION

A. **CUSHION COURSE**

Shredded SBR rubber particles	86% by weight
Polyurethane Binder	14% by weight

B. **WEARING COURSE**

EPDM rubber granules	80% by weight
Aliphatic Binder	20% by weight

2.5 PRECAST CONCRETE CURB

A. Precast concrete for curbing at 28 days shall be 5,000 pound per square inch air-entrained concrete conforming to the requirements and applicable provisions of Section 501 and M4.02.0 of the Standard Specifications.

1. Warped, cracked, broken, spalled, stained or otherwise defective precast units are not acceptable.
2. Curbing shall be reinforced with two (2) - #4 rebars, grade 60.
3. Approximate weight of precast curb is 135 lbs./linear foot.
4. Air entrainment is 6 – 7% minimum with a 2 – 4" maximum slump.
5. Dowel Interlocking Pins between curb sections shall be #5 rebar, 6" lengths, 1 pin minimum between curb sections.

B. Acceptable manufacturers of precast curbing are: Shea Concrete, Wilmington MA, tel: 800-696-7432; Precast Specialties Corp., Abington MA, tel: 781-878-7220; Scituate Precast, Scituate MA, tel: 800-322-4488.

- C. Fabricate precast concrete units complying with manufacturing and testing procedures, quality control recommendations and following dimensional tolerances unless otherwise indicated.
 - 1. Fabricate precast concrete units straight, smooth and true to size and shape with exposed edges and corners precise, square and true unless otherwise indicated. Provide uniformly chamfered edge and corner treatment.
 - 2. Defective Work: Discard precast concrete units that do not conform to requirements including strength, manufacturing tolerances and finishes. Replace with precast concrete units that meet requirements.
- D. Precast design modifications may be made only as necessary to meet field conditions and to insure proper fitting of the work and only as acceptable to Owner's Representative. Maintain general design concept shown without increasing or decreasing sizes of members or altering profiles and alignment shown.
- E. Installer Qualifications: Engage an experienced Installer who has completed similar architectural precast concrete work similar in material, design and extent to that indicated for this project and with a record of successful in-service performance.
- D. Forms: Accurately construct forms mortar tight and of sufficient strength to withstand pressures due to concrete placing operations and temperature changes. Maintain form work to provide completed precast concrete units of shapes, lines and dimensions indicated within specified fabrication tolerances.
- F. Cement Mortar for pointing joints between curbstones shall be a cement mortar composed of one part Portland cement and two parts sand, by volume with sufficient water to form a workable, stiff mixture.
- G. Surface Finish: Fabricate precast units and provide surface finishes as follows:
 - 1. Exposed surfaces: Steel trowel or polished top surface and sandblast finish other surfaces with a light sugar cube finish, all free of pockets, sand streaks and honeycomb with uniform color and texture.

2.6 MISCELLANEOUS MATERIALS

- A. CONCRETE FOR CRADLE at precast concrete curb shall conform to ASTM C94 using 3/4 inch maximum size aggregate and have a minimum compressive strength of 3,000 psi at 28 days.

PART 3 - EXECUTION

3.1 PLACEMENT OF AGGREGATE BASE COURSE FOR PAVEMENTS

- A. Construct gravel base course as detailed on the Drawings for all areas of new paved surfaces in this Section. Make any corrections necessary to gravel borrow furnished and installed under Section 31 00 00 - Earthwork, to the sections and elevations shown on the Drawings.
- B. Spread aggregate from self-spreading vehicles, approved type of power grader or by hand upon prepared subgrade. Spread evenly in layers so as to avoid separation of aggregates. Layers shall not exceed 6 inches in depth after compaction. Remove stones larger than 3 inches. When spread, rolled and compacted on the prepared surface, it shall form a stable surface. All rolling shall be done with a roller weighing 8 to 10 tons. Compact any portion which is not accessible to a roller by mechanical or hand tamper. Compact to 95% Proctor Density.
- C. Final rolled surface shall be true to the lines and grades indicated on the Drawings or as directed by the Owner's Representative. Fill in any depression that may appear during and after rolling with aggregate and reroll until the surface is true and even.
- D. Tolerance: 1/4 inch maximum above or below the cross-section grades and 1/4 inch maximum under a 10 foot line longitudinally.

- E. Maintain the surface of any layer in its finished condition until succeeding layer is placed.

3.2 INSTALLATION OF BITUMINOUS CONCRETE WALK PAVING

- A. Make any corrections necessary to gravel borrow furnished and installed under Section 31 00 00 - Earthwork, to bring to the sections and elevations shown on the Drawings.
- B. Construct bituminous concrete paving as shown on the Drawings and in accordance with the MassDOT Standard Specification Sections 420 and 420.60 to and including 460.68.
 - 1. The finished surface of the top course shall be spread parallel to the base course of pavement and shall conform to the grades shown on the Drawings and to the tolerances specified in Section 460.67 of the Standard Specifications. Surface shall be free of valleys and dips.
- C. No bituminous material shall be applied when the temperature is below 32° F.
- D. **No vehicular traffic of any kind shall be allowed to pass over the newly finished surface until it has had time to set. Twenty-four hours will be considered sufficient time for the pavement to set in most cases, but this period may be extended by the Owner's Representative as required by weather or other reasons.**
- E. All areas of finished paving on which water stands or which are found excessively uneven shall be promptly brought to the correct grade and line. When tested with a ten foot straight edge there shall be no deviation from true surface planes represented by the grade elevations shown on the Drawings in excess of 1/4 inch.
- F. Do any repair or patching to pavements outside the project site damaged by the work of the Contract.

3.3 CONCRETE PLACEMENT

- A. Do not place concrete until base course and forms have been checked for line and grade, and corrected as necessary. Take care to remove any temporary form spreaders prior to placing concrete. Moisten base course if required to provide a uniform dampened condition at time concrete is placed.
- B. Place concrete immediately after mixing in one course, monolithic construction, for full width and depth. Spread concrete as soon as it is deposited on the base course using methods which will prevent segregation of the mix. Consolidate concrete along the face of forms and adjacent to traverse joints with a mechanical vibrator. Keep vibrator away from joint assemblies, reinforcement or side forms. Hand spading, with square faced shovels only, will be permitted only with approval of the Owner's Representative. Consolidate with care to prevent dislocation of reinforcing and joint materials. No honeycomb work will be accepted.
- C. Unless otherwise permitted, execute the work such that a section begun in one day shall be completed in daylight on the same day. Provide security to protect concrete flatwork from damage. Marked up panels will be a cause for rejection.
- D. Deposit concrete continuously, and in layers of such thickness that no concrete will be deposited on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness within the section.

3.4 PLACING CONCRETE DURING HOT OR COLD WEATHER

- A. During cold weather, provide equipment and materials to maintain a temperature of at least 50 degrees F. in the freshly placed concrete during the curing period. Use no frozen materials or materials containing snow or ice in the mix. Place no dependence on salt or other chemicals for the prevention of freezing. Place no concrete on frozen subgrade. In all other respects, work in cold weather shall conform to ACI 306 and ACI 604.
- B. During hot weather, take suitable precautions to avoid drying of the concrete prior to finishing. Provide windbreaks, sunshades, covering, fog sprays, etc., as required. Concrete deposited in hot weather shall have

a placing temperature not greater than 80 degrees F., and shall be maintained at a temperature not greater than 90 degrees F. during the curing period. In all other respects, work in hot weather shall conform to ACI 605.

3.5 CONCRETE FINISHING

- A. It is the intent of this Specification to require forms, mixture of concrete and workmanship so that concrete surfaces, when exposed, will require no patching. Remove any concrete which is not formed as shown the Drawings or for any reason is out of alignment or level, or shows a defective surface, unless the Owner's Representative grants permission to repair the defective area. Permission to patch any such area shall not be considered a waiver of the Owner's right to require a complete removal of defective work if the repair does not, in his opinion, satisfactorily restore the quality and appearance of the surface. The Owner's Representative shall be the sole judge of appearance as such relates to artistic effect.
- B. Do not dust the concrete surface with dry cement or sand during finishing except as herein specified. Any excess "puddling" shall be cause to reject the total section of concrete. Perform no finish operation while free water is present. Delay jointing and edging operations until all bleed water and water sheen has left the surface.
- C. After striking off and consolidating concrete, smooth the surface by screeding and floating with an aluminum or magnesium float. Adjust the floating to compact the surface and produce a uniform texture.
- D. After floating, test the surface for trueness with a 10 foot straightedge. Distribute the concrete as required to remove surface irregularities, and refloat all repaired areas to provide a continuous smooth finish. Work edges of slabs and joints with a 1/8 inch radius edging tool. After edging and jointing operations, refloat the surface. After completion of floating, and when excess moisture and surface sheen have disappeared, complete surface finishing as follows:
 - 1. Broom Finish: Immediately following floating, steel trowel the surface. Use a stiff bristled wire broom, with a long handle, to obtain a light broom finish. Install brush marks true to the direction indicated on the Drawings or perpendicular to the flow of traffic if not shown. Repeat edging and jointing operations as required to obtain a distinct edge.

3.6 INSTALLATION OF PRECAST CONCRETE CURB

- A. Before commencing work, thoroughly clean compacted gravel base of all dust, dirt and foreign matter.
- B. Provide setting diagrams, templates, instructions and directions as required for installation.
- C. Install precast units plumb, level, true to line and in alignment within PCI MNL-117 and specified limits of erection tolerances on compacted gravel base. Provide temporary supports and bracing as required to maintain position, stability and alignment as units are being permanently connected.
 - 1. Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses. Take every precaution to prevent direct bearing contact between pieces.
- D. Anchor precast concrete units in position with concrete cradle poured at front and back of curb units as indicated on the Drawings. Remove temporary shims, wedges and spacers as soon as possible after anchoring and grouting are completed.
- E. Grouting Connections: Smoothly grout all joints between precast curb units.

3.7 INSTALLATION OF RESILIENT SAFETY SURFACE

- A. Installation shall be as recommended by the manufacturer and shall be to the depths and widths in locations as indicated on the Drawings.

- B. Contractor shall coordinate the delivery and installation of the resilient safety surface. Resilient safety surface shall be installed immediately following the installation of the play equipment and the curing of concrete footings.
- C. During the curing period of the surface, the Contractor is responsible for overnight security.
- D. Grading and Compaction of Subgrade
 - 1. Do all necessary grading in addition to that specified under Section 31 00 00 – Earthwork, of these Specifications to properly construct the Subgrade as detailed on the Drawings for the resilient playground surface. Subgrade shall be compacted to 95% Proctor.
 - 2. Slope on subgrade course shall be maintained at 1/4" per foot in any direction, and 1/8" per foot in any 3' direction.
- E. Resilient Safety Surface Installation shall be started when the crushed stone subgrade has been approved by the Owner's Representative. Prior to installation of the Cushion Base, the entire subgrade surface shall be clean and dry and free of any foreign and loose material.
- F. Cushion Course Installation: Installation will be started after the subgrade is completed and approved. The thickness of the Cushion Course is as shown on the Drawings.
 - 1. Wherever practical, Cushion Course shall be installed in one continuous pour on the same day. When a second pour is required, fully coat the edge of the previous work with polyurethane binder to ensure 100 percent bond with the new work. Apply adhesive in small quantities so that new cushion layer can be placed before the adhesive dries.
 - 2. The temperature should be 40 degrees and rising during installation of the resilient surface.
- G. Wear Course Installation: The Wear Course will be poured on and spread over the cushion course. Installers shall use a measured screed rod 1/16" thicker than the required depth. The installation shall be seamless.
 - 1. Colored designs shall be the full wear course depth.
 - 2. Where the rubber surfacing meets the precast curb, the vertical face of curbing shall be coated with primer adhesive prior to the spreading of the Wear Course.
- H. GUARANTEE/WARRANTY
 - 1. The resilient safety surface shall be guaranteed against defects in workmanship or quality for a period of one (1) year after final acceptance. The contractor shall replace, repair, recoat or otherwise make satisfactory to the Owner any unacceptable surfacing at no additional cost to the Owner.

3.8 FIELD QUALITY CONTROL

- A. The testing laboratory shall make the following inspections and tests: Test aggregate materials for compliance with MassDOT or furnish accepted certificate of compliance from source of supply.
- B. Testing laboratory will perform the following general services:
 - 1. Determine maximum dry density and optimum moisture content of soils in accordance with standards herein before specified.
 - 2. Provide optimum moisture - maximum density curves.
 - 3. Test and approve all compacted aggregate layers before construction thereon.
- C. Testing laboratory will perform the following field tests:

1. Determine frequency of field tests to assure densities required. Unless otherwise determined, minimum field testing shall include one (1) density test for each 1,000 square feet.

3.9 PROTECTION

- A. Properly protect new and existing paving, curbing, fencing, posts and landscaping against splashing and spattering from bituminous during preparation and installation of pavements. Any materials so damaged shall be removed and replaced or satisfactorily cleaned with a pre-approved method no additional cost.

3.10 PERFORMANCE REQUIREMENTS

- A. Conduct inspections, perform testing and make repairs or replace unsatisfactory precast units as required. Limitations as to amount of patching permitted are subject to acceptance by Owner's Representative.
 1. Repair exposed exterior surfaces of precast concrete units to match color, texture and uniformity of surrounding concrete when permitted by Owner's Representative.
 2. Remove and replace damaged precast concrete units when repairs do not meet requirements.

3.11 CLEANING AND PROTECTION OF PRECAST CONCRETE CURB

- A. Clean soiled exposed surfaces after erection to remove marks, dirt and stains. Wash and rinse according to precast concrete manufacturers recommendations. Do not use cleaning materials or processes that could change the appearance of exposed finishes or which may harm adjacent materials. Consult precast concrete manufacturer for acceptable cleaners. Wash and rinse in accordance with precast manufacturer's recommendations. Do not use cleaning materials, processes, wire brushes, acid or other solutions that could change the character of exposed concrete finishes. Use nonmetallic tools in cleaning operation. Protect other work from staining or damage due to cleaning operations. Protect work in progress and after completion.

PART 4 - COMPENSATION

4.1 METHOD OF MEASUREMENT

- A. Bituminous Concrete Walk Paving will be measured as a unit and paid for at the Contract Square Yard price, complete in place.
- B. Resilient Safety Surface will be measured as a unit and paid for at the Contract Square Foot price, complete in place.
- C. Concrete Walk Paving will be measured as a unit and paid for at the Contract Square Foot price, complete in place.
- D. Precast Concrete Curb will be measured as a unit and paid for at the Contract Linear Foot price, complete in place.
- E. Excavation and placement of granular fill material and grading and compacting of subbase material shall be paid for under those line items in Section 31 00 00 – Earthwork, of this Specification.
- F. Excavation and removal of undesirable and unsuitable materials shall be paid for under those line items in Section 31 00 00 – Earthwork, of this Specification.

4.2 BASIS OF PAYMENT

- A. The Contractor will be paid the contract unit price per square yard for the Bituminous Concrete Walk Paving, complete in place, including excavation, compaction, grading and the dense graded crushed stone base in place. The unit price shall include full compensation for all labor, materials, tools and equipment and

all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Owner's Representative and as specified herein.

- B. The Contractor will be paid the contract unit price per square foot for the Resilient Safety Surface, complete in place, including excavation, compaction, grading and the dense graded crushed stone base in place. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Owner's Representative and as specified herein.
- C. The Contractor will be paid the contract unit price per square foot for Concrete Walk Paving, complete in place, including excavation, compaction, grading and the dense graded crushed stone base in place. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Owner's Representative and as specified herein.
- D. The Contractor will be paid the contract unit price per linear foot for Precast Concrete Curb, complete in place, including excavation, compaction, grading, precast concrete curb, concrete cradle and dense graded crushed stone base in place. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Owner's Representative and as specified herein.

4.3 PAYMENT ITEMS

A.	Item 14	Bituminous Concrete Walk Paving -	Square Yard
	Item 15	Resilient Safety Surface -	Square Foot
	Item 16	Concrete Walk Paving -	Square Foot
	Item 17	Straight Precast Concrete Curb -	Linear Foot

END OF SECTION
32 10 00

SECTION 32 30 00 - SITE IMPROVEMENTS

Item 18	New 8' Bench -	Each
Item 19	New Accessible Picnic Table	Each
Item 20	New Picnic Table	Each
Item 21	Play Equipment 'A', 'B', 'C' and 'D' -	Lump Sum

PART 1 - GENERAL

1.1 REFERENCE

- A. Attention is directed to the printed form of the Contract, General Conditions, Supplementary General Conditions and Division 1 of which these specifications are hereby made a part.

1.2 SECTION INCLUDES

- A. Furnish and install the following site improvements:
 - 1. New 8' Benches
 - 2. New Accessible Picnic Table
 - 3. New Picnic Table
 - 4. Play Equipment 'A', 'B', 'C' and 'D'
- B. All necessary paint finishes for bare metal.
- C. Furnish and install all accessory items including hardware, connecting angles, clip angles, bolts, welds, bracing members, etc. necessary for a complete installation.

1.3 RELATED WORK

- A. Section 32 10 00 - Bases, Ballasts, Paving and Curbing
- B. Section 32 31 00 - Chain Link Fencing

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. **Contractor must get approval by Newton Parks and Recreation for play equipment substitutions prior to submitting bid. Contractor shall order approved play equipment within 48 hours of execution of contract and approval by City of Newton.**
- B. Protect and handle materials, during loading, shipping, unloading at the site, storage and erection as required to prevent damage to finish surfaces, section contours, squareness, straightness and flatness of fabricated members.

1.5 DEFECTIVE MATERIALS

- A. Do not install defective materials. No patching or hiding of defects will be permitted. Refer to Owner's Representative for decision on all materials showing flaws or imperfections upon delivery to the job site. The Owner's Representative's decision as to rejection of materials shall be understood to be final. Remove rejected material from the site and replace with new material.

1.6 REFERENCES

- A. CPSC Handbook for Public Playground Safety National Bureau of Standards, for the U.S. Consumer Product Safety Commission, latest edition.
- B. American Standards for Testing Materials, latest edition; Standards A-120, VA569, 1487-98 (S), and A-500 (ASTM).
- C. ASTM F1487: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
- D. ACI: American Concrete Institute
- E. Standard Steel Composition, Society of American Engineers
- F. Standard Steel Composition, American Iron and Steel Institute
- G. American Steel Institute (ASI), Standards for Structural Steel, latest edition.
- H. Standards for Welding, American Welding Society, (AWS).
- I. Department of Defense DOD-Std 2138 (SH)
- J. American Society of Testing and Material ASTM D-4417
- K. Steel Structures Painting Council (SSPC):
 - SP1 Solvent Cleaning
 - SP7 Brush-off Blast Cleaning
 - PA 2 Measurement of Dry Coating Thickness with Magnetic Gages
 - PAC Shop Painting

1.7 QUALITY ASSURANCE

- A. Codes and Standards: Comply with all rules, regulations, laws and ordinances of the City of Newton, the Commonwealth of Massachusetts and all other authorities having jurisdiction. All labor, materials, equipment and services necessary to make the Work comply with such requirements shall be provided without additional cost to the Owner except as otherwise required.
- B. The Contractor shall arrange for and obtain all permits and licenses required for the complete work specified herein and shown on the Drawings. All fees shall be paid for by the Contractor.
- C. Engage a playground installer who has successfully completed within the last 3 years at least 6 applications similar in type to that of this project and who will assign mechanics from these earlier applications to this project, of which one will serve as lead mechanic.
- D. Provide a copy of the inspection certificate from a Certified Playground Safety Inspector confirming that the play equipment is in compliance with ASTM F1487, and all other applicable standards.
- E. Provide a letter from the playground installer stating that the playground equipment was installed according to the manufacturer's instructions.
- F. Construction Tolerances:
 - 1. Variations from plumb: 1/4 inch in 10 feet.
 - 2. Variations from level: 1/4 inch in 20 feet.
 - 3. Variation of linear line: 1/2 inch in 20 feet.
 - 4. Variations from slope as indicated for finished surface of paving: 1/4 inch in 10 feet.
 - 5. Variations from flush in unit-to-unit offset: 1/32 inch.
- G. All materials used shall be sound and free from cracks, seams or starts that might impair its structural integrity or function. No patching shall be permitted except with the approval of the Owner's Representative.
- H. Workmanship: All work shall be done by trained mechanics specializing in this type of work.
- I. Fabrication: Comply with requirements of ASTM A143, ASTM A384 and ASTM A385.

1.8 SUBMITTALS

- A. Manufacturer's catalog data and specification sheets for each type of manufactured product, including certification that each product complies with specified requirements. Include instructions for handling, storage, installation, protection and written warranties.
- B. Shop drawings for each manufactured product. Include in the drawings sizes, shapes, finishes and location of all materials, bedding, bonding, anchoring and jointing of all dimension work, relations to adjacent construction, relations to work of other trades, and all other details required for the proper installation of the work with due reference to all related work. Verify and take all necessary field measurements prior to fabrication. Do not fabricate or install any items until shop drawings have been approved.
- C. Samples: Manufacturer's standard color samples for site improvements and play equipment.
- D. Submit paint and coating materials list giving the manufacturer's name, product name and product number for each material.
- E. Manufacturer's instructions for inspection, maintenance and repair of play apparatus including, but not limited to, what, when and how to inspect, maintain and repair each piece of play apparatus.
- F. Warranties: Submit written warranties from play equipment and site furnishings manufacturers to the Owner.

1.9 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Handle and ship all items so as to prevent damage in transit. Use only material that is not subject to staining or discoloration for blocking and packing. Deliver materials to site in manufacturer's original containers with labels intact and seals unbroken.
- B. Unload and handle all items carefully so as to prevent chipping and breakage. Protect all items during handling, storage and construction against moisture, soiling, staining and physical damage. Store on wood skids or pallets, covered with non-staining, waterproof membrane. Place and stack to distribute weight evenly and to prevent breakage or cracking. Protect stored materials from weather with waterproof, non-staining covers or enclosures, but allow air to circulate around materials. Replace materials damaged in any manner.
- C. Locate storage piles, stacks or bins to avoid and be protected from heavy and unnecessary traffic.

1.10 MAINTENANCE MATERIALS

- A. Provide Owner with not less than two sets of tools required for removing and replacing vandal resistant hardware.
- B. Spare Parts:
 - 1. Hardware: 2 of each type.

PART 2 - MATERIALS

2.1 PLAY EQUIPMENT

- A. GENERAL: All play equipment components shall conform to the requirements of ASTM F1487 and applicable sections of the Consumer Products Safety Commission (CPSC).

1. All materials shall have a demonstrated record of durability in the playground or similar outdoor setting and be suitable for safe play. All metals shall be painted, galvanized, powder coated or otherwise treated to inhibit rust. Black steel is not acceptable.
2. Colors for all play equipment shall be chosen by Owner's Representative in consultation with City of Newton.
3. There shall be no Polyvinyl Chloride (i.e. PVC, Vinyl, Plastisol) present in any portion of the play structures.
4. All play equipment fasteners and hardware shall be 18-8 grade stainless steel (300 series). Capped lock nuts which cover bolts ends shall be included. Tamper-resistant hardware is utilized on principle clamping mechanisms. Special tools shall be provided for assembly and maintenance. Clamp connection disassembly and slippage is eliminated by using drive rivets. Physical locking devices are used on all exposed and accessible connection points, such as lock nuts. A nylon thread-locking patch is applied to certain hardware. Liquid thread-lock is also used to hinder fastener removal.

B. PLAYGROUND EQUIPMENT is manufactured by PlayWorld Systems of Lewisburg, Pennsylvania or approved equal. The local area representative is UltiPlay Parks and Playgrounds, Uxbridge MA, tel: 508-634-1497. Play Equipment 'A', 'B' and 'C' is intended for use by children in the 2-5 and 5-12 year old age ranges.

1. PLAY EQUIPMENT 'A' is an Arch Swing for 2-12 years olds with a maximum fall height of 96". Swing structure is constructed of 3 ½" steel tubing support posts and 3 bays. Seating is comprised of 1 ADA seat, 3 belt seats and 2 tot seats.
2. PLAY EQUIPMENT "B" is a climbing structure for 5-12 year olds composed of a silo climber, geo vertical climber, tower climber, curvy climber, nuvo swirl roof, nuvo transfer station and ada stairs, crazy bones bridge, nuvo roofs, two twist climbers, 1 slither slide and 1- 360 degree slither slide. The highest fall height is 108" at the spiral slide.
3. PLAY EQUIPMENT 'C' is a climbing structure for 2-5 year olds composed of two glide slides, one elevated deck with hex cabana roof, babble-on, transfer station with step, treasure tumble panel and storefront and sloped rock climbing surface. The highest deck height is 48".
4. PLAY EQUIPMENT 'D' is a seesaw structure mounted on a spring for 2-12 year olds composed of four seats with backs and a platform in the center.
5. PLAY EQUIPMENT COMPONENTS are constructed of the following materials:
 - a. SUPPORT POSTS shall be fabricated from cold rolled, electric resistance welded 3 ½" steel tubing. Tubing shall be triple coated with a hot-dipped Flo-Coat® uniform zinc galvanized coating, a chromate conversion coating and a clear polymer coating. Galvanized exterior coating weight shall be within the range of .4 oz/sq. ft. and .6 oz./sq. ft. Tubing shall have a corrosion resistant, zinc-rich paint interior coating. Exterior finish shall be powder coating which is electrostatically applied at a thickness of 2 to 5 mils.
 1. Support posts shall extend a minimum of 24" into below grade concrete footing. Footings shall be installed at a minimum depth of 4'. The concrete is poured around the post. Top of footing shall be held a minimum of 4" below finish grade.
 - b. SLIDES shall be rotationally molded from color-compounded, first quality, linear low density, polyethylene. Dry-blended or molded-in resins are not acceptable. Polyethylene shall be ultraviolet (UV) stabilized to UV-8 and have anti-static additives. Cross-section of polyethylene is .25 in. nominal thickness, double wall construction.

- c. THE TRANSFER STATIONS, CLIMBERS, PLATFORMS, LADDERS AND VORTEX shall be fabricated from cold rolled, electric resistance welded steel tubing. Tubing shall be triple coated with a hot-dipped Flo-Coat® uniform zinc galvanized coating, a chromate conversion coating and a clear polymer coating. Coating shall be skid resistant, textured, functionalized polyethylene copolymer-based thermoplastic powder coating designed for maximum mechanical performance, impact resistance and UV stability.
- d. CLAMPS shall be provided at hinged assemblies to facilitate structure assembly. Unique S-lap design eliminates all string entanglement points at connection. Clamps are to be permanently fastened to the support post with a drive rivet to eliminate disassembly and slippage. Double banded design provides the highest clamping pressure around the entire clamp. Clamps used in different applications for general attachments in the play equipment shall be die cast of high strength 380 aluminum alloy. Ultimate tensile strength shall be 47 ksi. Clamps shall be finished with a shot blast and a baked on polyester powder coating. ASTM Specifications: B-85. Tenzalloy (40-E, 315.0) is not acceptable as a load bearing clamp material.
- e. BARRIER PANELS shall be constructed of cold rolled, electric resistance welded steel tubing and rotationally molded plastic parts. Tubing shall be triple coated with hot-dipped Flo-Coat® uniform zinc galvanized coatings, a chromate conversion coating and a clear polymer coating. Galvanized exterior coating weight shall be within the range of .4 oz./sq. ft. and .6 oz./sq. ft. Tubing shall have a corrosion resistant, zinc-rich paint interior coating. Plastic parts shall be molded from color-compounded, first quality, linear low density, polyethylene. Dry-blended or molded-in resins are not acceptable. Polyethylene shall be ultraviolet (UV) stabilized to UV-8 and have anti-static additives. Cross-sectional design shall be .25 in. nominal thickness, double wall construction.
- f. Cast Almag Clamps shall be provided to facilitate structure assembly. Clamps are to be permanently fastened to the support post with a drive rivet. Clamps shall be cast of high strength Almag 35 (535.0-F) aluminum alloy. Tenzalloy (40-E, 315.0) is not acceptable as a load bearing clamp material. Ultimate tensile strength shall be 40 ksi. Yield strength shall be 21 ksi. Finished with a 420 micro finish and a baked on polyester powder coating. Clamps which incorporate a slip-through design or clamping devices that use a "bolt through" design are not acceptable. The use of two (2) piece steel half clamps are not acceptable.
- g. All hardware shall be constructed of stainless steel for corrosion resistance.

2.2 SITE FURNISHINGS

- A. BENCHES: New Bench shall be Model 88-80PL by Dumor Inc., P.O. Box 142, Mifflintown, PA 17059, or approved equal, in 8' length.
 - 1. Bench slats shall be constructed of recycled plastic. Bench shall be delivered with the S-2 surface mount.
 - 2. Provide Owner's Representative with colors for selection.
- B. PICNIC TABLES: shall be the Picnic Table #141684 by Landscape Structures, Delano MN or approved equal. Provide two tables per the following:
 - 1. Table tops and bench planks shall be formed from 11 gauge HRPO perforated sheet steel. Steel shall have 5/16" diameter holes on surface.
 - 2. Provide Owner's Representative with Tender Tuff colors, or equal, for selection.
 - 3. Provide one table that is accessible with a 92" long table top and 72" long benches, attached to tubular leg frame.
 - 4. Provide one table that has a 72" long table top and 72" long benches, attached to tubular leg frame.

2.3 MISCELLANEOUS MATERIALS

- A. CONCRETE FOR FOOTINGS shall conform to ASTM C94 using 3/4 inch maximum size aggregate and have a minimum compressive strength of 3,000 psi at 28 days.
- B. GROUT for use at expansion anchors shall be a non-staining, non-shrink cement grout conforming to ASTM C-827. Grout shall contain no metals. Grout shall be chosen from one of the following:
 - 1. Five Star Grout, as manufactured by: U.S. Grout Corporation, 401 Stillson Road, Fairfield CT 06430, tel: 800-243-2206.
 - 2. Sika Grout 212, as manufactured by: Sika Corporation, 201 Polito Avenue, Lyndhurst NJ 07071, tel: 201-933-8800.
 - 3. Harris Construction Grout, as manufactured by: A.H. Harris & Sons Inc. 10 West Mill Street, Medfield MA 02052, tel: 508-359-7321.

PART 3 - EXECUTION

3.1 INSTALLATION OF SITE IMPROVEMENTS - GENERAL

- A. Assemble and install site improvements in accordance with the Drawings and manufacturer's written instructions as required.
- B. Fasten items securely together by anchoring and fastening as shown and as required by recognized standards. Make tight connections between members. Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.
- C. Coordinate casting of supports into concrete.
- D. Install grout and sealants in strict accordance with manufacturer's written instructions.
- E. Repair damaged surfaces and finishes after completion of installation, or replace damaged members as directed where damage is beyond satisfactory repair. Using manufacturer's specified paint, touch up any nicks or scrapes on site furnishings.
- F. Perform all excavation of every description and through whatever materials encountered to the depths indicated on the Drawings. In all other respects excavation shall conform to the requirements of Section 31 00 00 – EARTHWORK, of these Specifications.
- G. Perform all work by workmen skilled and experienced in the trade in a neat and clean fashion. Install all work in accordance with the Drawings in straight and true lines, plumb and true to line and grade. Fasten items securely together.

3.2 INSTALLATION OF PLAY EQUIPMENT

- A. Equipment installation:
 - 1. Assemble and install play equipment in accordance with the manufacturer's shop drawings and specifications except as modified herein. Set apparatus and equipment plumb, level and square to paving unless otherwise shown on the Drawings. Firmly secure apparatus and equipment in place.
 - 2. Prior to installation and erection, the Contractor shall stake out the location of the playground equipment for review and approval by the Owner's Representative.
 - 3. Erection of play equipment: Set support posts square and plumb and bolted to steel sill plates that lay on top of prepared subgrade or pavement as shown in the Drawings. Set sill plates level and to the grades required to assure level installation of platforms and components. Field welding of posts to sill plates shall not be permitted.
 - 4. Set equipment plumb, level and square to paving unless otherwise shown on the Drawings. Firmly secure apparatus and equipment in place. Make all fastenings as shown on the drawings and securely

tightened. All work shall be done so that no hazardous projections exist on the finished work. Firmly secure apparatus and equipment in place.

5. Coordinate casting of supports into concrete. All concrete foundations shall be poured to a frost depth of 4' minimum.

3.3 INSTALLATION OF SITE FURNISHINGS

- A. New benches and picnic tables shall be installed in straight lines, plumb and level. Furnishings shall be surface mounted onto concrete paving according to the Drawings, and this Section.

3.4 CONCRETE FOOTINGS

- A. EXCAVATION: Drill holes for post footings in firm, undisturbed or compacted soil of diameters and spacing shown. If not shown on the Drawings, excavate holes at least 4 times the diameter of the post unless greater dimension is recommended by play equipment manufacturer. Unless otherwise indicated on Drawings, excavate hole depths approximately 3" lower than the post bottom, with bottom of footings set not less than 48" below the surface when in firm, undisturbed soil. Excavate deeper as required for adequate support in soft and loose soils and for posts with heavy lateral loads. Remove excess excavated material from the site.
- B. SETTING POSTS: Remove loose and foreign materials from sides and bottoms of holes, and moisten soil prior to placing concrete. Center and align posts in holes prior to placing concrete. Place concrete around posts in a continuous pour, and vibrate or tamp for consolidation. Check each post for horizontal, vertical and top alignment, and hold in position during placement and finishing operations. Posts shall be plumb from all directions.
 1. Trowel finish tops of footings, and slope or dome to direct water away from posts. Keep top of concrete 12" below finish grade. Set keeps, stops, sleeves and other accessories into concrete as required. Keep exposed concrete surfaces moist for at least 7 days after placement, or cure with membrane curing materials, or other acceptable curing method.
- C. CONCRETE STRENGTH: Allow concrete to attain at least 75% of its minimum 28 day compressive strength, but in no case sooner than 7 days after placement, before additional weight is installed.

3.5 CLEANING AND PROTECTION

- A. Remove all equipment, materials and debris caused by work of this Section and leave the site of the work in a clean condition insofar as this work is concerned.
- B. Touch up and restore finishes where damaged according to manufacturer's instructions. Remove mortar or dirt from all surfaces.
- C. Protect work in progress and after completion. Keep the premises neat and clean at all times.

PART 4 - COMPENSATION

4.1 MEASUREMENT AND PAYMENT

- A. Play Equipment 'A', 'B', 'C' and 'D' will be measured as a unit and paid for at the Contract Lump Sum price, complete in place, including but not limited to all labor, material and equipment necessary for installation. Any item of work not specifically listed but noted in the specifications or drawings relating to site improvements shall be included for payment under these items.
- B. New Benches and Picnic Tables will each be measured as a unit and paid for at the Contract Unit Price per each, complete in place, including but not limited to all labor, material, and equipment as necessary for

installation. Any item of work not specifically listed but noted in the specifications or drawings relating to site improvements shall be included for payment under these items.

4.2 PAYMENT ITEMS

Item 18	New 8' Bench -	Each
Item 19	New Accessible Picnic Table	Each
Item 20	New Picnic Table	Each
Item 21	Play Equipment 'A', 'B', 'C' and 'D' -	Lump Sum

END OF SECTION
32 30 00

SECTION 32 31 00 - CHAIN LINK FENCING

Item 22 4' ht. Vinyl Chain Link Fence

Linear Foot

PART 1 - GENERAL

1.1 REFERENCE

- A. Attention is directed to the printed form of the Contract, General Conditions, Supplementary General Conditions and Division 1 of which these specifications are hereby made a part.

1.2 SCOPE OF WORK

- A. The work under this Section consists of furnishing and installing vinyl coated chain link fencing, hardware as shown on the Drawings and as specified herein including all labor, materials, and equipment necessary to finish the work complete in place.

- B. Work includes, but is not limited, to the following:

- 1. Vinyl Chain Link Fencing

1.3 RELATED WORK

- A. Section 02 41 13 - Selective Site Demolition
- B. Section 31 00 00 - Earthwork
- C. Section 32 10 00 - Bases, Ballasts, Paving and Curbing

1.4 REFERENCES

- A. Applicable specifications and standards: Reference to the standards, specifications and tests of the following technical societies, organizations and governmental bodies is made herein:
 - 1. MassDOT: "Standard Specifications for Highways and Bridges", Massachusetts Department of Transportation, latest edition.
 - 2. All fencing shall conform to the specifications of the Chain Link Fence Manufacturer's Institute, and as specified herein.
 - 3. ASTM A90: Tests for Weight of Coating on Zinc Coated [Galvanized] Iron or Steel Articles.
 - 4. ASTM A123: Zinc [Hot Galvanized] Coatings on Products, Fabricated from Rolled, Pressed and Forged Steel Shapes, Plates, Bars and Strip.
 - 5. ASTM A370: Mechanical Testing of Steel Products.
 - 6. ASTM A392: Zinc Coated Steel Chain Link Fence Fabric.
 - 7. ASTM A570: Hot Rolled Sheet and Strip, Structural Quality
 - 8. ASTM D1499: Recommended Practice for Operating Light and Water Exposure Apparatus [Carbon Arc Type] for Exposure of Plastics.
 - 9. ASTM D1535: Specifying Color by the Munsell System.
 - 10. ASTM D1729: Visual Evaluation of Color Differences of Opaque Materials.
 - 11. ASTM F626: Fence Fittings.
 - 12. ASTM F900: Industrial and Commercial Swing Gates.
 - 13. ASTM F934: Colors for PVC Coated Chain Link Fence Materials.
 - 14. ASTM F1043: Specifications for Strength and Protective Coatings on Metal Industrial Chain Link Fence.
 - 15. ASTM F1083: Pipe, Steel, Hot Dipped Zinc Coated [Galvanized] Welded, for Fence Structures.
 - 16. ASTM F1234: Protective Coatings on Steel Framework for Industrial Fences.

1.5 QUALITY ASSURANCE

- A. Products: From a qualified manufacturer having a minimum of five years of experience manufacturing PVC coated chain link fencing.
- B. Workmanship: Vinyl chain link fence fabric shall be produced by methods recognized as good commercial practices. The vinyl shall be plasticized and thoroughly compounded so there are no dispersed pigments, stabilizers or other discrete particles present. The PVC coating shall be evenly applied without voids and free of blisters. The PVC coated wire shall be woven into fabric without tears or cuts.
- C. All work shall be done by trained mechanics specializing in this type of work.

1.6 SUBMITTALS AND SAMPLES

A. SHOP DRAWINGS

- 1. Submit shop drawings or catalog cuts of chain link fence and details showing materials, height of fences, post spacing and sizes, dimensions of concrete footings, vertical spacing of rails, line post and rail details, dimensions of fence fabric and wire gauge, wire and band-it ties, fabrication process, attachments, and anchoring to existing materials.

- B. Submit samples for all fence materials prior to the start of construction. One (1) sample approximately 6" long, or 6" square of fabric material, post, cap, and rail with ties, all connectors and typical accessories shall be submitted for approval. Review of fabric will be for color and texture only. Compliance with all other requirements is the exclusive responsibility of the Contractor.

- C. CERTIFICATE OF COMPLIANCE: Notarized statement that fencing and appurtenances conform to the specified requirements.

1.7 ACCEPTANCE OF INSTALLATION CONDITIONS

- A. The subcontractor shall be fully responsible to the Contractor for the proper execution and performance of the work described herein. It shall be his responsibility to inspect all installation conditions which may affect his work adversely. He shall report to the Contractor in writing, with a copy to the Owner's Representative if he so desires, any failure of the Contractor to provide suitable installation conditions. Commencement of any portion of work by this subcontractor will be considered as unqualified approval of installation conditions for that portion.

PART 2 - MATERIALS

2.1 VINYL CHAIN LINK FABRIC

- A. Polyvinyl chloride plastic resin finish over galvanized steel wire, ASTM A116, Class I, shall be not less than 10 to 15 mils (0.015") thick. Color shall be selected by the Owner's Representative.
 - 1. Chain link fabric shall be in one piece fabric widths.
- B. Wire Size: Helically wound and woven to heights indicated on the drawings with a uniform 1 3/4" inch diamond mesh, with a core wire diameter of 0.148 inches (9 gauge), and a break load strength of 650 lbs. minimum.
- C. Color: ASTM F934. Color of Vinyl Chain Link Fabric shall be black.

D. Knuckle top and bottom selvages.
2.2 POSTS, RAILS AND BRACES

A. All fence pipe for posts, rails, braces and appurtenances shall be vinyl clad, round, seamless, cold-formed, hot dip galvanized steel, Schedule 40 pipe conforming to ASTM A53, or approved equal.

1. Pipe shall be hot dip galvanized steel meeting ASTM A120 with a minimum average 1.8 oz/square foot of coated surface area.
2. All structural shapes shall be vinyl coated with a minimum 15 mils thick coating of plasticized polyvinyl chloride applied by fusion method over a thermoset plastic bonding agent. The bond shall exhibit equal or greater strength than cohesive strength of the vinyl. All cut ends shall be coated with vinyl at a minimum 15 mils thick of thermally fused PVC in color to match fabric. The color shall black.

B. END, LINE AND CORNER POSTS

1. CORNER AND END POSTS up to 6' height shall be of the minimum sizes and weights:
 - a. 2.375" OD pipe weighing 3.65 pounds per linear foot, except as shown on Drawings.
2. LINE POSTS up to 6' height shall be of the minimum sizes and weights:
 - a. 1.90" OD pipe weighing 2.70 pounds per linear foot.

C. TOP, MIDDLE AND BOTTOM RAILS: 1.660" OD pipe weighing 2.27 pounds per linear foot. Furnish in manufacturer's longest lengths, with expansion type couplings, approximately 6" long, for each joint. One coupling in every 5 couplings shall have an expansion spring. Provide means for attaching the top rail securely to each gate, corner, pull and end post. Top rail shall form a continuous brace from end to end of each run of fence.

2.3 FENCE ACCESSORIES

A. All fence accessory shapes shall be vinyl coated with a 7 mil minimum thick coating of plasticized polyvinyl-chloride applied by fusion method over a thermoset plastic bonding agent. The bond shall exhibit equal or greater strength than cohesive strength of the vinyl. All cut ends shall be coated with vinyl. The color shall be black or green and chosen by Owner's Representative.

B. POST TOPS shall be pressed steel designed as a weather tight closure cap (for tubular posts). Furnish and install one (1) pass-through looped cap for each line post, and one (1) acorn style cap for each end or corner post. Furnish caps with openings to permit through passage of the top rail.

C. STRETCHER BARS shall be in one piece lengths equal to the full height of the fabric, with minimum cross section of 3/16" x 3/4". Provide one (1) stretcher bar for each gate and end post, and 2 for each corner and pull post.

D. STRETCHER BAR BANDS shall be heavy pressed steel, wrought iron or malleable iron with a minimum cross-section of 1/8" x 3/4". Bands may also be used with special fittings for securing rails to end, corner, pull and gate posts.

E. HOOK TIES shall be minimum 6 gauge aluminum.

F. NUTS AND BOLTS shall be hot dipped galvanized. Provide PVC paint to coat nuts and bolts to match color of fabric.

G. CEMENT CONCRETE for post footings shall conform to ASTM C94 using 3/4 inch maximum size aggregate and have a minimum compressive strength of 3,000 psi at 28 days. Concrete shall be Class D air entrained Portland cement concrete with a 1 to 3" slump.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin fence installation and erection before the final grading is completed, with finish grades established, unless otherwise permitted.
- B. Ensure property lines and legal boundaries of work are clearly established.

3.2 CONCRETE FOOTINGS FOR FENCE POSTS

- A. GENERAL: Install fence posts prior to paving.
- B. FOOTING EXCAVATION: Drill holes for post footings in firm, undisturbed or compacted soil of diameters and spacings shown. Excavate holes to the minimum diameters as recommended by fence manufacturer, or at least 3 times the diameter of the post. Excavate hole depths approximately 6" lower than the post bottom, with bottom of posts set not less than 48" below the surface when in firm, undisturbed soil. Remove excess excavated material from the site. Where ledge is encountered, the Contractor shall notify the Owner's Representative to determine method of installation.
- C. SETTING POSTS: Remove loose and foreign materials from sides and bottoms of holes, and moisten soil prior to placing concrete. Center and align posts in holes 3" below bottom of excavation. Place concrete around posts in a continuous pour, and vibrate or tamp for consolidation. Check each post for horizontal, vertical and top alignment, and hold in position during placement and finishing operations.
 - 1. Trowel finish tops of footings, and slope or dome to direct water away from posts. Keep top of concrete 6" below finish grade. Set keeps, stops, sleeves and other accessories into concrete as required. Keep exposed concrete surfaces moist for at least 7 days after placement, or cure with membrane curing materials, or other acceptable curing method.
- D. CONCRETE STRENGTH: Allow concrete to attain at least 75% of its minimum 28 day compressive strength, but in no case sooner than 7 days after placement, before additional weight is installed.

3.3 FENCE ERECTION

- A. Install fencing in accordance with ASTM F567 and manufacturer's instructions except as herein modified, and to the lines and grades indicated on the Drawings.
- B. TOP AND BOTTOM RAILS: Run top rail continuously through post caps or extension arms. Bend rails to radius for curved runs. Provide sleeves for top rails for rigid connections with expansion couplings as recommended by fencing manufacturer. Firmly attach bottom rails with fittings and accessories.
- C. TENSION WIRE: Install tension wires by weaving through the fabric and tying to each post with not less than 6 gauge galvanized wire or clips. Install tension wires before stretching fabric.
- D. FABRIC: Leave approximately 2" between finish grade and bottom selvage, except where bottom of fabric extends into concrete. Pull fabric taut and tie to posts, rails and tension wires. Install fabric on street side of fence and anchor to framework so that fabric remains in tension after pulling force is released.
 - 1. Repair damaged coatings in the shop or during field erection by recoating with manufacturer's recommended repair compound. Apply in accordance with the manufacturer's directions.
 - 2. The fabric shall be installed on the "public" side of the fence.
 - 3. All fabric shall be aligned so that the top row of the fabric mesh is tied to the top rail, and so that the bottom selvage of fabric mesh stands one and one-half (1 ½) inches above the finish grade of the adjacent materials grade and that the bottom row of the fabric mesh is tied to the bottom rail.

4. Fabric shall be properly stretched and securely fastened to the posts and rails, and between posts. The top and bottom of the fabric shall be fastened to the horizontal braces as herein specified, and approved by the Owner's Representative.
5. The fabric shall be fastened to the end and corner posts with tension bars and stretcher bar bands spaced at 15" oc intervals.

- E. **STRETCHER BARS:** Thread through or clamp to fabric at 4" oc, and secure to end, corner, pull and gate posts with stretcher bars spaced at not more than 15" oc.
- F. **TIE WIRES:** Use aluminum hook ties, conforming to the diameter of pipe to which attached, clasping pipe and fabric firmly with ends twisted at least 2 full turns. Bend ends of wire to minimize hazard to persons or clothing. Place tie wires at 15" OC minimum.
- G. **FASTENERS:** Install nuts for tension band and hardware bolts on side of fence opposite fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

3.4 CLEANING

- A. Remove all equipment, materials and debris caused by work of this Section and leave the work site in a clean condition insofar as this work is concerned.
- B. Rectify any damage to adjacent work caused by these operations. Patch and make like new all disturbed related and adjacent materials including pavements, plantings, etc.

PART 4 - COMPENSATION

4.1 METHOD OF MEASUREMENT

- A. 4' ht. Vinyl Chain Link Fence will be measured as a unit and paid for at the Contract Unit Price per Linear Foot.
- B. Related work including excavating and backfill, gravel bases, concrete footings and compaction shall be included and paid for as part of the Contract Unit Price per each item in this Section.

4.2 BASIS OF PAYMENT

- A. The Contractor will be paid the contract unit price per linear foot for the 4' ht. Vinyl Chain Link Fence, complete in place, including the footing excavation, disposal of all undesirable materials, pouring of concrete footings and installation of fence posts and fabric. The unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item as shown on the plans, as directed by the Owner's Representative and as specified herein.

4.3 PAYMENT ITEMS

Item 22 4' ht. Vinyl Chain Link Fence

Linear Foot

END OF SECTION

32 31 00

SECTION 32 90 00 – LAWNS AND PLANTING

Item 23	Topsoil Spread and Fine Graded from Stockpile-	Cubic Yard
Item 24	Seeded Lawns -	Square Foot
Item 25	Ulmus americana ‘Valley Forge’-	Each
Item 26	Acer saccharum ‘Bonfire’ -	Each

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Preparation of final subgrades in lawns; spreading loam; fine grading; seeding; mulching; planting; maintenance and guarantee.

1.2 RELATED WORK

- A. Section 02 41 13 - Selective Site Demolition
- B. Section 31 00 00 - Earthwork
- C. Section 32 10 00 - Base, Ballasts, Paving and Curbing

1.3 REFERENCES

- A. ASNS: "American Standard for Nursery Stock", American Association of Nurserymen, 1973 Edition.
- B. ASTM: American Society for Testing and Materials.
- C. Federal Specification JJJ-S-181b, Seeds, Agricultural.
- D. Federal Specification O-F-241c (1), Fertilizers, Mixed, Commercial.
- E. SPN: "Standardized Plant Names", American Joint Committee on Horticultural Nomenclature, 1942 Edition.
- F. SRA-156: U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act.

1.4 CERTIFICATES, INSPECTIONS, TESTS AND SUBMITTALS

- A. The existing topsoil stockpiled on site and the new loam imported to the project site shall each be given a complete soil analysis by a competent laboratory approved by the Owner's Representative. The analysis shall be in accordance with ASTM D422. The report of the analysis shall include recommendations for the kinds and quantities of soil amendments to be used. The cost of the laboratory tests shall be paid by the Contractor. Submit the report of the analysis to the Owner's Representative at least 30 days prior to delivery of topsoil to the site or use in the work.
 - 1. Mechanical and chemical (pH soluble salts) analysis shall be by a public extension service agency or a certified private testing laboratory in accordance with the current "Standards" of the Association of Official Agricultural Chemists.
 - 2. Soil Test Report shall include a mechanical sieve analysis with soil classification. Organic content and Cation Exchange Capacity (CEC) shall be reported. Chemical analysis shall include pH (1:1 soil-water ratio), buffer pH, Soluble Salts (1:2 soil-water ratio), Nitrate Nitrogen, Ammonium Nitrogen, Phosphorus, Potassium, Calcium, Aluminum, Magnesium, Manganese, Ferric Iron and Sulfate.
 - 3. Soil test report shall clearly recommend appropriate application of deficiencies and to adjust mechanically screened loam as necessary to support successful turf growth and to meet the requirements of mechanically screened loam as specified, herein.
- B. If requested, furnish Owner's Representative with duplicate copies of invoices for soil amendments used. Each lot shall be subject to sampling and testing at the discretion of the Owner's Representative.

1. If and when bulk delivery and/or custom mixing of soil amendments is authorized, provide Owner's Representative with written notarized affidavit certifying the weight, analysis, name of manufacturer and warranty for each item.

C. Submit manufacturer's certification of compliance to the Specifications for the seed mix prior to sowing seed. Furnish Owner's Representative with producer's test reports indicating the results of seed purity, germination tests and weed content dated within 9 months of sowing.

D. Plants shall be subject to inspection and approval by the Owner's Representative at their place of growth, and upon delivery for conformity to specification requirements. Such approval shall not obviate the right of inspection and rejection during the progress of the work.

1. Submit a written request to the Owner's Representative at least 10 calendar days prior to digging for inspection of plant materials at their place of growth. State in the written request the place of growth and quantity of plants to be inspected. The Owner's Representative reserves the right to refuse inspection at this time if, in his judgment, a sufficient quantity of plants are not available for inspection.

E. Plants including seed shall comply with all applicable State and Federal laws in respect to inspection for plant diseases and infestation. Certificates of inspection shall accompany the invoice for each shipment as may be required by laws for transportation. File certificates with the Owner's Representative prior to acceptance of material. Inspection by State and Federal governments at place of growth does not preclude rejection of material at the site.

F. Submit samples of the following materials in the quantities indicated for approval prior to use.

1. Mulch for planting: 1/2 cubic foot.

G. Additional tests of material as delivered may be required from time to time. Materials in question may not be used, pending test results. Remove rejected materials and replace with new, acceptable materials, whether in stockpiles or in place. Contractor shall pay all costs of testing regardless of results. Do not use materials being tested or retested until Owner's written approval has been obtained.

1. Existing screened topsoil from stockpile and loam borrow: The Contractor shall provide representative samples to testing laboratory for testing and approval. Contractor shall have testing reports sent directly to the Owner's Representative and pay all costs. Report shall be submitted at least one month before any loaming is to be done.

1.5 DELIVERY, STORAGE AND HANDLING

A. Do not deliver TOPSOIL to the site until soil analysis has been approved by the Landscape Architect. Do not deliver topsoil to the site in a frozen or muddy condition.

B. Deliver all SOIL AMENDMENTS and WOOD CELLULOSE FIBER MULCH to the site in manufacturer's standard containers showing weight, analysis, name of manufacturer and warranty. Append a summary of this product information to each invoice. Store in a weatherproof storage place in such a manner that they will be kept dry and their effectiveness not impaired. Caked or otherwise damaged soil amendments shall be rejected.

C. Deliver SEED in original sealed standard sized containers. Label all seed in accordance with State regulations and SRA-156. Store seed in such a manner that it will be protected from damage by heat, moisture, rodents or other causes. Seed which has become wet, moldy or otherwise damaged shall be rejected.

D. PLANT MATERIAL

1. Immediately before digging spray all plant material in full leaf with anti-transpirant, applying an adequate film over trunks, branches, twigs and foliage. Do not prune plants before delivery.
2. Dig, ball and burlap (B&B) plants with firm natural balls of earth of diameter not less than that recommended by ASNS, and of sufficient depth to include the fibrous and feeding roots. Dig balls for collected material at least 1/3 greater in diameter than above. Double burlap all plants which are 6 inches in caliper and larger.
3. Do not remove container grown material from containers until ready for planting.
4. Dig up and prepare plants for shipment in a manner that will not cause damage to branches, shape and future development of the plants after replanting. Cover all plant material while in transit.
5. Protect plants at all times from sun or drying winds. Keep plants that cannot be planted immediately upon delivery in the shade, well protected with soil, wet moss or other acceptable material and keep well watered. Plants shall not remain unplanted for longer than 3 days after delivery.
6. Do not bind plants with wire or rope at any time so as to damage the bark or break branches. Lift and handle plants from the bottom of ball only. Plants with cracked or broken balls before or during planting operations shall be rejected.

1.6 QUALIFICATIONS

- A. The lawn installation and planting shall be performed by personnel familiar with the accepted procedure of lawn construction and planting and shall be under the constant supervision of a qualified foreman.

PART 2 – MATERIALS

2.1 TOPSOIL

- A. TOPSOIL for use on new lawn areas and in planting soil in plant beds shall be provided by the Contractor from the on-site stockpile of screened topsoil and shall be free of any admixture of subsoil, stones larger than one (1) inch, clods of hard earth, plant roots, sticks or other extraneous materials. Should on-site stockpile prove to be inadequate for requirements of new lawns and planting, screened loam borrow shall be imported to the site. Topsoil and loam borrow shall be fertile, friable, natural loam capable of sustaining vigorous plant growth. Topsoil and loam borrow shall be a "sandy loam" or a "fine sandy loam" of uniform composition as determined by mechanical analysis and based on the USDA classification system. In addition it shall meet the requirements above as well as the following mechanical analysis:

<u>Sieve Size</u>	<u>% Retained</u>
1 inch	0
1/2 inch	0-3
No. 100	40-60

1. The clay content of the material passing U.S.S. No. 100 mesh shall not be greater than 60% as determined by the Bouyoucous Hydrometer or by the Decantation Method. The organic content shall be 5% to 20% as determined by the Thomas Rapid Test Method or by loss on ignition on moisture free samples dried at 100 degrees C. The pH value shall be between pH 6.0 and pH 6.5. It shall contain no toxic materials. Soluble salts shall not be greater than 75 parts per million. Add soil amendments if required at no additional cost to the Owner.

2.2 SOIL AMENDMENTS

- A. GENERAL: All soil amendments shall conform to the standards of the Association of Agricultural Chemists and shall comply with State and Federal regulations.
- B. LIMESTONE, if required, shall be free flowing Agricultural Grade Dolomitic Limestone ground to such fineness that 50% will pass a 100 mesh sieve and 98% will pass a 20 mesh sieve. Limestone shall contain at least 50% total oxides and not less than 85% total carbonates.
- C. ALUMINUM SULFATE, if required, shall be unadulterated commercial grade.
- D. GYPSUM, if required, shall be unadulterated commercial grade Calcium Sulfate.
- E. COMMERCIAL FERTILIZER shall be a complete fertilizer, uniform in composition and free flowing. At least 50% of the Nitrogen shall be derived from natural or synthetic organic sources. Available Phosphoric Acid shall be from superphosphate, bone or tankage. Potash shall be derived from Muriate of Potash containing at least 60% Potash. Percentages of Nitrogen, Available Phosphoric Acid and Water-soluble Potash in the fertilizer mix shall be based on laboratory test recommendations as approved by the Owner's Representative.
 - 1. Superphosphate shall be that product resulting from treating finely ground phosphate rock with sulfuric acid and as commonly used for agricultural purposes containing 20% available phosphoric acid.
- F. BONEMEAL shall be finely ground commercial raw bonemeal with 4% minimum Nitrogen and 20% minimum Phosphoric Acid.
- G. PEAT MOSS shall be Horticultural Moss Peat containing 50% minimum fiber content, 10% maximum ash content, 500% to 1200% absorbency and a pH of 4.5 to 6.0 in accordance with ASTM D4427. It shall be brown in color and shredded such that particles pass a 1/2 inch mesh.
- H. MYCORRHIZAL FUNGI shall be 'PHC Plant Saver 4-7-4' manufactured by Lebanon Turf, 1600 E. Cumberland St., Lebanon, PA 17042, tel: 1-800-233-0628.

2.3 PLANTING SOIL

- A. PLANTING SOIL shall consist of 8 parts topsoil and 1 part manure by volume. It shall have a pH value between 6.0 and 6.5.

2.4 GRASS SEED

- A. GRASS SEED shall be fresh, clean, dry, new crop seed meeting the standards of SRA-156. Seed shall be of the following varieties, mixed in proportion by weight and testing the minimum percentages of purity and germination.

<u>Pounds/ 1000 SF</u>		<u>Percent Purity</u>	<u>Percent Germination</u>
2.0	Kentucky Bluegrass	90	75
2.0	Creeping Red Fescue	97	85
<u>0.5</u> 4.5	Annual Ryegrass	98	90

- 1. Kentucky Bluegrass shall consist of a blend of two or more of the following varieties: Birka, Eclipse, Flying, Majestic, Touchdown and Warren's A-34.
- 2. Creeping Red Fescue shall consist of one or more of the following varieties: Dawson, Ensylva and Ruby.
- 3. Weed seed shall not exceed 0.5% by weight.

2.5 MULCH FOR SEEDED AREAS

- A. MULCH for seeded areas shall be natural and suited to horticultural use. It shall not contain lumps, roots or other foreign matter over one (1) inch in diameter. It shall be free from noxious weeds, seeds and other elements harmful to lawns. Mulch shall be subject to inspection and approval by the Owner's Representative at the source and upon delivery. Mulch shall not contain more than 35% moisture by weight. Mulch shall be one of the following at the Contractor's option:

1. Hay: Mowed and properly cured grass, clover or other acceptable plants. Salt hay is not acceptable.
2. Straw: Stalks or stems of grain after threshing.

2.6 MULCH FOR HYDROSEEDED AREAS

- A. MULCH for hydroseeded areas shall be Wood Cellulose Fiber Mulch. It shall be fiber processed from whole wood chips and clean recycled newsprint in a 1:1 proportion manufactured specifically for standard hydraulic mulching equipment. Fiber shall not be produced from recycled material such as sawdust, paper or cardboard. Mulch shall be chosen from one of the following: "Conwed Fibers Cellulose with Tack: by Profile Products LLC, 750 Lake Cook Rd., Suite 440, Buffalo Grove, IL 60089; "Silva-Fiber Mulch" by Weyerhaeuser Company, Tacoma, Washington; or approved equal.

2.7 PLANT MATERIALS

- A. PLANTS shall be of specimen quality, exceptionally heavy plants so trained or favored in development and appearance so as to be unquestionably and outstandingly superior in form, number of branches, compactness and symmetry.

1. Plants shall be nursery grown in accordance with good horticultural practices, unless specifically authorized to be collected, and grown under climatic conditions similar to those in the locality of the project for at least two years. They shall have been root pruned within the past two years.
2. Plants shall be freshly dug at time of delivery. No heeled-in plants or plants from cold storage will be accepted.
3. Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insect pests, eggs or larvae and shall have healthy, well developed fibrous root systems. They shall be free from physical damage or adverse conditions that would prevent thriving with the specified result.
4. Plants shall be true to species and variety and shall conform to the measurements specified in the Plant List except that plants larger than specified may be used without an increase in Contract price if approved by the Owner's Representative. Substitutions of plant materials will not be permitted unless authorized in writing by the Owner's Representative.
5. Plants shall be measured when branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch tip to tip.
6. The measurements specified are the minimum size acceptable and are the measurements after pruning where pruning is required.
7. Plants that meet the measurements specified, but do not possess a normal balance between height and spread shall be rejected. Thin, poorly branched or sparsely rooted plants will be rejected, regardless of whether they meet the minimum technical requirements of ASNS.
8. In case of any discrepancy between the Plant List and the Planting Plan, the Planting Plan will govern.

2.8 MULCH FOR TREE CIRCLES

- A. MULCH shall be shredded pine bark, dark brown in color, passing a one inch square mesh and retained on a 1/8 inch square mesh. Moisture content shall not exceed 35%. No dyed or rubber mulches shall be used.

2.9 WATER

- A. WATER shall be free of substances harmful to plant growth. It shall be provided by the Contractor. Furnish all necessary hose, hose connections and watering equipment.

2.10 GUYING APPARATUS

- A. TREE TIES shall be Arbor-Tie Tree fabric guys or approved equal, and of suitable length.
- B. WOOD STAKES shall be 2x2 inch sound Cedar pointed at one end and reasonably free of knots. Place three stakes at each tree.

PART 3 - INSTALLATION

3.1 PREPARATION OF SITE

- A. After the subgrade in the new lawn areas to be loamed have been brought to grade, and immediately prior to dumping and spreading the approved mechanically screened loam or topsoil, the subgrade shall be decompacted according to Section 31 00 00, EARTHWORK of this Specification. Remove from loosened subsoil all stones greater than two inches and all debris or rubbish from the loosened subsoil. Such material shall be removed from the site.
 - 1. Regrade subgrade as necessary to a true smooth slope parallel to new finish grade and at the required depth. Grading shall also eliminate depressions and ridges.
 - 2. Where no grades are shown, areas shall have a smooth and continual grade between existing or fixed controls and elevations shown on the Drawings. Subgrade shall be inspected and approved by the Owner's Representative before the placing of topsoil.
- B. Mechanically screened topsoil from stockpile shall be placed and spread over approved lawn areas to a depth sufficiently greater than **six inches** so that after natural settlement and light rolling, the completed work will conform to the lines, grades, and elevations indicated. Supply additional loam, after testing and approval as may be needed, to provide the depths and finished grades specified under the Contract. Place topsoil only when it can be followed within a reasonable time by seeding operations. Mechanically remove any weed growth prior to seeding. Do not permit weed growth to go to seed.
- C. Disturbed areas outside the limit of seeding shall be spread with six inches of mechanically screened loam or mechanically screened topsoil to the finished grade.
- D. No subsoil or loam shall be handled in any way if it is in a wet or frozen condition.
- E. Sufficient grade stakes shall be set for checking the finished grades. Stakes must be set in the bottom of swales and at top of slopes. Grades shall be established which are accurate to one tenth of a foot either way. Connect contours and spot elevations with an even slope.
- F. After the approved mechanically screened topsoil has been spread, the seed bed shall be carefully prepared by hand raking. Stones, roots and other materials greater than 1" in diameter shall be removed.
- G. The entire surface shall then be rolled with a hand roller weighing not more than 100 pounds per foot of width. During the rolling, all depressions caused by settlements or rolling shall be filled with additional loam and the surface shall be regraded and rolled until it presents a smooth and even finish to the required grade.
- H. Contractor shall obtain Owner's written approval of fine grading and bed preparation before doing any seeding. No seeding shall take place until the Owner's Representative approves topsoil grade. All topsoil areas shall slope to drain. Correct finished surfaces to eliminate depressions holding water.

3.2 INCORPORATION OF SOIL ADDITIVES

- A. After the topsoil and loam borrow have been spread and graded, apply soil amendments at the rate recommended in the topsoil analysis for each. Apply limestone at least 5 days prior to application of

fertilizer. Apply commercial fertilizer within 10 days of seeding or planting. Spread organic compost at the rate of 4 cubic yards per 1,000 square feet.

- B. Thoroughly and evenly incorporate soil amendments into the soil to a depth of 4 inches by discing or other approved method. In areas inaccessible to power equipment, use hand tools. After the incorporation of soil amendments into the soil, fine grade the bed to remove all ridges and depressions, and clear the surface of all stones one inch or more in diameter and other debris. Remove excessive quantities of smaller stones as directed by the Owner's Representative. When tilling within the branch spread of trees scheduled to remain, do so in a manner which will cause minimum damage to root systems.
- C. Seeding or planting may be done immediately thereafter provided the bed has remained in a good friable condition and has not become muddy or hard. If it has become hard, till to a friable condition. Water dry soil to a depth of 4 inches 48 hours prior to seeding or planting.

3.3 SCHEDULE FOR SEEDING AND PLANTING

- A. The actual seeding of lawns and planting shall be done only during periods within the season which are normal for such work as determined by weather conditions and by accepted practice in this locality. At the option of, and on the responsibility of, the Contractor seeding of lawns and planting may be done under unseasonable conditions, or out of season, without additional compensation subject to the approval at the time of work and methods of operation by the Owner's Representative. Lawn maintenance will be the same as for normal planting. Plant guarantee periods remain as specified. No frozen ground planting will be allowed.
- B. Seeding and Planting shall be done within the following dates:

1. Trees	Spring:	April 15 to June 1
	Fall:	Oct. 1 to Dec. 1
2. Lawns	Spring:	April 15 to May 15
	Fall:	August 15 to Oct. 1

3.4 SEEDING

- A. Fine grade and seed the areas as indicated on the Drawings within the limit of work not covered by structures, paving and all areas disturbed by construction inside and outside the limit of work. Contractor shall employ an approved method of sowing seed with use of an approved mechanical power seeder, mechanical hand seeder, hydroseeding or other approved method.
- B. Broadcast seeding: Broadcast seed either by hand or with other approved sowing or hydraulic seeding equipment at the specified rate. Distribute seeds uniformly over designated areas. Sow half the seed with the sower moving in one direction and the remainder with the sower moving at right angles to the first sowing. Do not broadcast seed when wind velocity exceeds 15 mph. Use hay or straw mulch with other seeding methods at a rate of one and one half tons per acre.
- C. Hydroseeding of new lawn areas shall be as follows:
 - 1. Prior to the start of work, furnish a certified statement as to the number of pounds of materials to be used per 100 gallons of water. This statement shall also specify the number of square feet of hydroseeding that can be covered with the quantity of solution in the hydroseeder.
 - 2. Hydroseed with wood cellulose fiber mulch at a rate of 46 pounds per 1,000 square feet or 2000 pounds per acre.
 - 3. For the hydroseeding process, a mobile tank with a capacity of at least 500 gallons shall be filled with water and the mixture noted above in the specified proportions. The resulting slurry shall be thoroughly mixed by means of positive agitation in the tank. Apply the slurry by a centrifugal pump using the hose

application techniques from the mobile tank. Only hose application shall be permitted. At no time shall the mobile tank or tank truck be allowed onto the prepared hydroseed beds. The hose shall be equipped with a nozzle of a proper design to ensure even distribution of the hydroseeding slurry over the area to be hydroseeded and shall be operated by a person thoroughly familiar with this type of seeding operation.

4. Limit of grading and earthwork shall be limit of hydroseeding unless otherwise indicated on the Contract Documents. All lawn areas disturbed outside the limit of hydroseeding shall be hydroseeded.
5. Hydroseeding shall be a two-step process.
 - a. Step one shall consist of spreading 100 percent of the required seed uniformly over the prepared loam bed so that the seed comes into direct contact with the soil. To mark the progress of the hydroseeding operation the Contractor may add 10 percent of the wood cellulose fiber mulch to the slurry.
 - b. Step two shall consist of a separate application of wood cellulose fiber mulch immediately following the first step of hydroseeding noted above. Apply the wood cellulose fiber mulch at a rate of 2,000 pounds per acre.

- D. If seeding is authorized between May 15 and August 15, add one (1) pound of annual rye grass per 1,000 square feet to the specified seed mix.
- E. When delays in operations extend the work beyond the most favorable planting season for species designated or when conditions are such that satisfactory results are not likely to be obtained, halt work as directed and resume only when conditions are favorable or when approved alternate or corrective measures and procedures have been effected. No seeding shall be done when the ground is frozen, excessively wet or otherwise nontillable.

3.5 EROSION CONTROL

- A. It shall be the responsibility of the Contractor to render all lawn areas and plant beds erosion free. The Contractor may accomplish this by any of several alternate methods, any of which may be used provided such method is acceptable to the Owner's Representative. Approval of method by Owner's Representative does not free Contractor of responsibility for controlling erosion.

3.6 PLANTING

- A. Inform the Owner's Representative when planting will commence and the anticipated delivery date of plant material. Failure to notify the Owner's Representative in advance, in order to arrange proper scheduling, may result in loss of time or removal of any plant or plants not installed as specified or directed.

B. PLANTING OPERATIONS FOR TREES:

1. Place wood stakes in proposed locations for trees and obtain approval of Owner's Representative before excavation is begun. Make adjustments in locations as directed.
2. If stone, underground construction work, tree roots, poor drainage or obstructions are encountered in the excavation of tree pits, alternate locations may be selected by the Owner's Representative without additional cost. Where locations cannot be changed as determined by the Owner's Representative submit cost required to remove obstructions to a depth of not less than 6 inches below the required pit depth. Proceed with work only after approval of Owner's Representative.
3. Notify Owner's Representative in writing of all soil or drainage conditions which the Contractor considers detrimental to the growth of plant material.
4. Set plants at the same relationship to finished grade as they bore to the ground from which they were dug. After settlement, the crown of the plant ball shall not be more than one inch lower than the surrounding finished grade. Backfill planting soil in layers of not more than 8 inches and tamp each

layer before the next layer is placed. When plants have been backfilled approximately 2/3 full, water thoroughly before installing remainder of planting soil to top of bed, eliminating all air pockets. Do not backfill beds with planting soil until the exact location of all plants is approved by the Owner's Representative.

5. Set trees in the center of pits, plumb and straight. Brace rigidly in position until the planting soil has been tamped solidly around the ball and roots. Cut ropes or strings from top of ball after plant has been set. Remove top 1/3 of burlap wrapping around ball.
6. Mulch and water all plants immediately after planting. Flood plants with water twice within 24 hours of planting. Form saucers around trees planted in lawn areas.
7. After trees have been installed and prior to placement of mulch, place 1 packet of "PHC Plant Saver 4-7-4" in the top 1/2" of planting soil. Work into planting soil so that the material is incorporated.

C. FERTILIZING

1. For Spring planting only add commercial fertilizer to the planting soil at the rate recommended in the topsoil analysis. Mix thoroughly.
2. Fertilize Fall planting the following Spring. Place fertilizer for other plant material over planting area and work into upper soil layer. Use commercial fertilizer at the following rates:

Trees: 2 pounds per inch of caliper

D. PRUNING

1. Prune new plants only at time of planting and in accordance with American Association of Nurserymen standards in such a manner as to preserve the natural character of the plant. Pruning shall be done by experienced personnel under the supervision of the Owner's Representative.
2. Remove all dead wood, suckers and badly bruised or broken branches. In addition, remove approximately 1/4 of all small branching leaf canopy of deciduous plants by thinning out and shortening branches. Do not cut the leader. Trees with leaders removed shall be rejected. Use only clean sharp tools. Make all cuts flush with the trunk or branch.

F. GUYING: Guy all trees in a moderately taut manner immediately after planting. Tree ties shall not so taut that the tree is not able to move, and guys shall also not girdle the bark that they are placed around. Plants shall stand plumb after guying.

E. CLEANUP: Upon completion of planting and pruning operations, remove all excess soil and debris from the site and repair any damage caused by these operations. Remove all tags, labels, plastic wraps, strings, twine, etc. from plants.

3.7 MAINTENANCE AND PROTECTION

A. MAINTENANCE shall begin immediately upon completion of seeding and after each plant is planted and shall continue until acceptance or for at least 30 days or as much longer as necessary to establish a uniform stand of the specified grasses or until substantial completion, whichever is later with the following requirements.

1. In the event that lawn operations are completed too late in the Fall for adequate germination and/or growth of grass, maintenance shall continue into the following Spring.
2. Maintenance of lawn areas shall consist of watering, weeding, cutting, raking of leaves, repair of all erosion, reseeding as necessary to establish a uniform and knitted stand of the specified grasses.
 - a. In seeded areas, keep soil moist during germination period. After germination, supplement natural rainfall to produce a total of 2 inches per week. Water lawns not less than twice per week until acceptance.
3. Maintenance of new planting shall consist of pruning, watering, cultivating, weeding, mulching, resetting plants to proper grades and/or upright position, repairing and adjusting guys, and restoration of planting saucers.

4. Furnish and apply such pesticides as are necessary to keep these areas free of insects and disease. Pesticides shall be approved by the Owner's Representative prior to use. Use in accordance with the specifications of the prevailing Public Health Authority.
5. Do not attempt first mowing until seeded areas reach 2-1/2 inches in height. Do not remove more than 40% of the grass leaf in initial or subsequent mowings. Maintain grass at 2 inches in height. Remove grass clippings. Lawns shall receive at least 3 mowings before acceptance.
6. Reseed areas greater than one foot square which fail to show a uniform stand of grass. To be acceptable, a stand of grass shall have a uniform count of at least 100 plants per square foot.
7. Immediately prior to the end of the maintenance period after Spring seeding, or early the following Spring for lawns established in the Fall, apply ammonium nitrate at the rate of 20 pounds per 1,000 square feet over lawn areas. Apply only when grass blades are dry. Water thoroughly after application.

B. PROTECTION

1. Protect new tree installations and seeded lawn at all times against trespassing and damage of all kinds for the duration of the maintenance period. If any plants become damaged or injured, treat or replace them as directed by the Owner's Representative at no additional cost to the Owner.
 - a. Newly seeded lawn areas shall be protected by a 4-foot high barrier of Tenax 4 ft. x 50 ft. Saf-T-Sno HD Snow Fence, 4 ft. HDPE snow fence, or approved equal. Color shall be orange or red.
2. Provide additional temporary protection fences and barriers in other locations where deemed necessary.
3. Remove temporary protection devices at the completion of maintenance period.

3.8 INSPECTION AND ACCEPTANCE

- A. At the end of the maintenance and protection period, submit a written request to the Owner's Representative to inspect all work for acceptance at least 10 calendar days before the anticipated date of inspection.
- B. Until this portion of the work is finally accepted, the Contractor shall be required to repair and replace any lawn area that is defective or becomes damaged when, in the judgment of the Owner's Representative, such defects or damages are the result of poor workmanship or failure to meet the requirements of the specifications. The cost of necessary repairs or replacements shall be borne by the Contractor.
- C. Acceptance of plant material by the Owner's Representative shall be for general conformance to the specified size, character and quality and shall not relieve the Contractor of responsibility for full conformance to the Contract Documents including correct species.
- D. If a substantial number of plants are sickly or dead at the time of inspection, acceptance will not be granted, and the Contractor's responsibility for maintenance of all plants shall be extended until replacements are made. Replacements shall conform in all respects to the Specifications for new plants and shall be planted in the same manner.
- E. Upon acceptance of the work, the Contractor shall be relieved of further responsibility for care and maintenance of the accepted areas. The Owner will be responsible for the maintenance of new lawns and planting upon acceptance of the work, and continuing through the guarantee period.

3.9 GUARANTEE PERIOD AND REPLACEMENTS

- A. Establishment shall begin immediately after each plant is planted and shall continue until the issuance of the Certificate of Acceptance. The Contractor shall guarantee all plants for a period of one year after the issuance of the Certificate of Acceptance as part of the base contract.
 1. All plant material guaranteed by the Contractor shall be in a good healthy and flourishing condition at the end of the guarantee period.
 2. Plants that die during the guarantee period shall be replaced as directed below and as authorized by the Owner.

- B. Lawn turf installed in the fall shall be guaranteed until the following spring.
- C. The Contractor shall furnish the Owner with a cost for one year of guarantee of all plantings which is included in the unit pricing for plants.
- D. Establishment and guarantee shall consist of keeping the plants in a healthy growing condition, re-mulching, removal of dead material, and resetting plants to proper grades or upright position.
- E. Replace without cost to the Owner, and as soon as weather permits, and within a specified planting period, all dead plants and all plants not in a vigorous, thriving condition, as determined by the Owner's Representative during and at the end of the guarantee period. Plants shall be free of dead or dying branches and branch tips, and shall bear foliage of a normal density, size and color. Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this Specification. Make all necessary repairs due to plant replacements at no additional cost to the Owner.
- F. The guarantee of all replacement plants shall extend for an additional period of one year from the date of their acceptance after replacement. In the event that a replacement plant is not acceptable during or at the end of said extended guarantee period, the Owner may elect subsequent replacement or credit for each item.
- G. Make periodic inspections as necessary, at no extra cost to the Owner, during the guarantee period to determine what changes, if any, should be made to the Owner's maintenance program. Submit in writing to the Owner's Representative any recommended changes.

3.10 FINAL INSPECTION AND ACCEPTANCE

- A. At the end of the guarantee period, submit a written request to the Owner's Representative to inspect all guaranteed work for final acceptance at least 10 calendar days before the anticipated date for final inspection.

PART 4 - COMPENSATION

4.1 METHOD OF MEASUREMENT

- A. The quantity of mechanically screened loam rehandled and spread for seeded lawns and planting from a stockpile on site shall include any excavation, screening, amendments and fine grading.
- B. Seeded Lawn installation shall include seeding, fertilizing, maintenance and protection.
- C. Trees will be measured as a unit in place, including excavation, fertilizer, plants, staking, mulching, maintenance, protection and guarantee.

4.2 BASIS OF PAYMENT – All payments shall include full compensation for all labor, tools, equipment, and all incidental work necessary to complete the work under these items as shown on the Drawings, as directed by the Owner's Representative, and as specified.

- A. Topsoil Spread and Fine Graded from Stockpile. The Contractor will be paid for at the contract unit price per CUBIC YARD, complete in place, which price shall also include all fine grading for lawn preparation and the grading of areas where stockpiles of topsoil and/or loam are removed and application of amendments.
- B. New seeded lawn will be measured at the Contract Unit Price per SQUARE FOOT, complete in place. Installation shall include seeding, mulch, watering, fertilizer, maintenance and protection complete in place.
- C. Trees will be paid for at the Contract Unit Price per EACH, complete in place.

4.3 PAYMENT ITEMS

Item 23	Topsoil Spread and Fine Graded from Stockpile -	Cubic Yard
Item 24	Seeded Lawn	Square Foot
Item 25	Ulmus americana 'Valley Forge' -	Each
Item 26	Acer saccharum 'Bonfire' -	Each

END OF SECTION

32 90 00

DIVISION 33 – UTILITIES

SECTION 33 00 00 - SITE UTILITIES

Item 27 New 12” HDPE Drain Line **Item 28 New Drainage Work**

Linear Foot
Lump Sum

PART 1 – GENERAL

1.1 REFERENCE

- A. Attention is directed to the printed form of the Contract, General Conditions, Supplementary General Conditions and Division 1 of which these specifications are hereby made a part.

1.2 SUMMARY

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to dry wells, drain line installation and connection of new dry wells to new or existing drain line. Also included is replacement of the existing catch basin grate with a new accessible grate.

1.3 RELATED WORK UNDER OTHER SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 32 10 00 - Bases, Ballasts, Paving and Curbing

1.4 SUBMITTALS

- A. Submit the following:
 - 1. Product Data: Submit manufacturer's technical product data and installation instructions for dry wells, HDPE drain piping, accessible catch basin grate, steel covers and grates and miscellaneous materials as required by the installation. All pipe furnished under the contract shall be manufactured in accordance with these Specifications.

1.5 REFERENCE STANDARDS

- A. The following standards are applicable to the work of this Section to the extent referenced herein:
 - 1. ASTM: American Society for Testing and Materials.
 - 2. ANSI: American National Standards Institute.
 - 3. AASHTO: American Association of State Highway and Transportation Officials.

1.6 QUALITY ASSURANCE

- A. Environmental Agency Compliance: Comply with local environmental regulations pertaining to storm drainage systems.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Protect pipe, pipe fittings, and seals from dirt and damage.

1.8 PROJECT CONDITIONS

- A. Comply with State Environmental Code.

1.9 TESTING

- A. Test and/or check lines before and after backfilling to assure free flow. Remove obstructions, replace damaged components and retest system until satisfactory.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. In accordance with the requirements of Section 31 00 00 EARTHWORK.

2.2 PIPES AND FITTINGS

- A. Drain Lines shall be perforated HDPE at sizes as shown on Drawings. Drain line shall be placed in trench with perforations facing down.

2.3 DRY WELLS

- A. Dry Wells shall be approximately 4' x 4' x 4' precast concrete #DW4X4H as manufactured by Shea Concrete Products, Wilmington, MA or approved equal. Dry well shall be built to accommodate H-20 loading and shall obtain a minimum of 4,000 psi after 28 days.
- B. Frames, Cover and Grate shall be obtained from EJ Company (www.ejco.com), or approved equal and shall be rated heavy duty.

2.4 MISCELLANEOUS MATERIALS

1. EPOXY GROUT shall conform to ASTM C-881 and equal to "Sikadur 32, Hi-Mod" high strength adhesive as manufactured by Sika Corporation, Lyndhurst NJ, or approved equal.
2. NEW CATCH BASIN GRATE shall match dimensions of existing grate, and fit within the existing frame. Grate shall be obtained from EJ Company (www.ejco.com), or approved equal and shall be rated heavy duty.
 - a. Grate shall be accessible, with no opening widths greater than ½" in the narrow direction.
3. FILTER FABRIC: shall be non-woven, equal to Amoco 4535 as manufactured by Amoco Fabrics & Fibers Co., Atlanta GA.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling shall be as specified under the work of Sections 31 00 00 EARTHWORK.

3.2 INSTALLATION, GENERAL

- A. Drawings indicate the general location and arrangement of the leaching galleys and new drain line. Install piping as required to connect the new drain lines to the new galleys, and to existing drain line on the site.
- B. Use proper size increasers, reducers, and couplings, where different sizes or materials of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.

3.3 PIPE JOINT CONSTRUCTION AND INSTALLATION

- A. General Locations and Arrangements: Contract Drawings indicate the general location and arrangement of the drain pipe. Install the drain pipe as indicated, to the extent practical.
- B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Maintain swab or drag in line and pull past each joint as it is completed. All piping shall be laid in the dry.
- C. Install piping pitched down in direction of flow as indicated on the Contract Drawings and in accordance with governing authorities having jurisdiction, except where more stringent requirements are indicated.
- D. Acceptance of Pipe: Acceptance will be on the basis of tests specified herein before. The quality of all materials used in the pipe, the process of manufacture, and the finished pipe shall be subject to review by the Engineer. Inspection may be made at the place of manufacture, or on the work site after delivery or at both places and the pipe shall be subject to rejection at any time on account of failure to meet any of the specification requirements, even though sample pipe units may have been accepted as satisfactory at the place of manufacture. All pipe which is rejected shall be immediately removed from the project site by the Contractor.

3.4 BACKFILLING

- A. General: Initial backfill shall be placed evenly on both sides of the pipe connections to distribute the load and not to cause movement or deflection of the pipe.

3.5 DRY WELLS

- A. Install dry wells, cover and grate as indicated on the Drawings.

3.6 FIELD QUALITY CONTROL

- A. Clear interior of piping and structures of dirt and superfluous material as the work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.
 - 1. Place plug in end of incomplete piping at end of day and whenever work stops.
 - 2. Flush piping to remove collected debris.

PART 4 - COMPENSATION

4.1 METHOD OF MEASUREMENT

- A. New 12" HDPE Drain Line installation shall include any trenching excavation, backfill, crushed stone, crushed stone double washed, 12" HDPE drain line, filter fabric and compaction. If the existing HDPE drain line is determined to be of use, the Contractor will credit the amount of new 12" HDPE drain line not installed back to the City of Newton.
- B. The new drainage work includes any excavation, backfill, crushed granular base, compaction, dry wells and installation, and miscellaneous items including installation of steel grates and covers.

4.2 BASIS OF PAYMENT – All payments shall include full compensation for all labor, tools, equipment, and all incidental work necessary to complete the work under these items as shown on the Drawings, as directed by the Owner's Representative, and as specified.

- A. New 12" HDPE Drain Line. The Contractor will be paid for this work at the unit price per LINEAR FOOT, complete in place, which price shall include any trenching excavation, backfill, crushed stone, crushed stone double washed, 12" HDPE drain line, filter fabric and compaction. If the existing HDPE drain line is

uncovered below grade and determined to be of use, the Contractor will credit the amount of new 12" HDPE drain line not installed back to the City of Newton.

- B. New Drainage Work. The Contractor will be paid for at the contract unit price per LUMP SUM, complete in place, which price shall also include any excavation, backfill, crushed granular base, compaction, dry wells, steel grates and covers.

4.3 PAYMENT ITEMS

Item 27	New 12" HDPE Drain Line	Linear Foot
Item 28	New Drainage Work	Lump Sum

END OF SECTION
33 00 00

CITY OF NEWTON

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1. FIRM NAME: _____
2. WHEN ORGANIZED: _____
3. INCORPORATED? _____ YES _____ NO DATE AND STATE OF INCORPORATION: _____
4. IS YOUR BUSINESS A **MBE**? _____ YES _____ NO **WBE**? _____ YES _____ NO or **MWBE**? _____ YES _____ NO
- * 5. LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:

- * 6. HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?
_____ YES _____ NO
IF YES, WHERE AND WHY?

- * 7. HAVE YOU EVER DEFAULTED ON A CONTRACT? _____ YES _____ NO
IF YES, PROVIDE DETAILS.

- * 8. LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:

- * 9. IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING CONTRACTS COMPLETED BY YOUR FIRM SIMILAR IN NATURE TO THE PROJECT BEING BID. A MINIMUM OF FOUR (4) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED, BUT NOT MANDATORY.

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____

DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

10. The undersigned certifies that the information contained herein is complete and accurate and hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: _____ BIDDER: _____

SIGNATURE: _____

PRINTED NAME: _____ TITLE: _____

END OF SECTION

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee club, or other organization, entity, or group or individuals.

(Signature of individual)

Name of Business

Nicholas Read  *Chief Procurement Officer*
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449
purchasing@newtonma.gov

Mayor
Setti D. Warren

Vendor

Debarment:

Date _____

Project Manual #14-142 – Improvements to Emerson Playground
Page 73 of 137

**Request for Taxpayer
Identification Number and Certification**

Give form to the
requester. Do not
send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶
☐ Other (see instructions) ▶

X Exempt
payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

or

Employer identification number

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

**Sign
Here**

Signature of
U.S. person ▶

Date ▶

Name

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

CONTRACT FORMS

The awarded bidder will be required to complete and submit documents substantially similar in form to the following.

These forms may need to be modified on account of changed circumstances, and are provided for informational purposes only.

CITY-CONTRACTOR AGREEMENT

CONTRACT NO. #14-142

THIS AGREEMENT made this _____ day of _____ in the year Two Thousand and Fourteen by and between the CITY OF NEWTON, a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, hereinafter referred to as the CITY, acting through its Chief Procurement Officer, but without personal liability to him,

and _____ hereinafter referred to as the

CONTRACTOR.

The parties hereto for the consideration hereinafter set forth agree as follows:

ARTICLE 1. STATEMENT OF WORK. The Contractor shall furnish all labor, materials, and equipment and perform all work required in strict accordance with the Contract Documents for the following project:

IMPROVEMENTS TO EMERSON PLAYGROUND

ARTICLE 2. TIME OF COMPLETION. Time is of the essence on this project. Work is expected to begin upon execution of this contract and shall be substantially completed by November 1, 2014.

ARTICLE 3. THE CONTRACT PRICE. The City shall pay the Contractor for the full and satisfactory performance of the Contract, in current funds the sum of:

(\$ _____)

ARTICLE 4. CONTRACT DOCUMENTS. The Contract Documents consist of the following documents which are either attached to this Agreement or are incorporated herein by reference:

- a. This CITY-CONTRACTOR Agreement;
- b. The City's Invitation for Bid ##14-142 issued by the Purchasing Department;
- c. The Project Manual, IMPROVEMENTS TO EMERSON PLAYGROUND, including the Instructions to Bidders; General Conditions; Special Conditions; MWBE/AA Requirements, Wage Rate Requirements and Wage Rate Schedule(s); General Requirements and Project Specifications; and Drawings, if included or referenced therein;
- d. Addenda Number(s) _____ ;
- e. The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;
- f. Certificate(s) of Insurance and surety bond(s) submitted by the CONTRACTOR in connection with this Project;
- g. Duly authorized and executed Amendments, Change Orders or Work Orders issued by the CITY after execution of this CITY-CONTRACTOR Agreement.

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR.

ARTICLE 5. ALTERNATES.

ARTICLE 6. APPLICABLE STATUTES. All applicable federal, state and local laws and regulations are incorporated herein by reference and the Contractor agrees to comply with same.

IN WITNESS WHEREOF, the parties have caused this instrument to be executed under seal the day and year first above written.

CONTRACTOR

By _____

Print Name _____

Title _____

Date _____

Affix Corporate Seal Here

City funds in the amount of
_____ are available in
account number 15J114 R58524
(Project # #14-142).

I further certify that the Mayor, or his
designee, is authorized is execute
contracts and approve change orders.

By _____

Comptroller of Accounts

Date _____

CITY OF NEWTON

By _____

Chief Procurement Officer

Date _____

By _____

Director of Parks and Recreation

Date _____

Approved as to Legal Form and Character

By _____

Associate City Solicitor

Date _____

CONTRACT AND BONDS APPROVED

By _____

Mayor or his designee

Date _____

CERTIFICATE OF AUTHORITY - CORPORATE

1. I hereby certify that I am the Clerk/Secretary of _____
(insert full name of Corporation)
2. corporation, and that _____
(insert the name of officer who signed the **contract and bonds.**)
3. is the duly elected _____
(insert the title of the officer in line 2)
4. of said corporation, and that on _____
(insert a date that is ***ON OR BEFORE*** the date the officer signed the **contract and bonds.**)

at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that

5. _____ the _____
(insert **name** from line 2) (insert **title** from line 3)

of this corporation be and hereby is authorized to execute contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

6. ATTEST: _____ *AFFIX CORPORATE
SEAL HERE*
(Signature of **Clerk or Secretary**)*
7. Name: _____
(Please print or type name in line 6)*
8. Date: _____
(insert a date that is ***ON OR AFTER*** the date the officer signed the **contract and bonds.**)

* The name and signature inserted in lines 6 & 7 **must** be that of the **Clerk or Secretary** of the corporation.

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

**Signature of Individual
or Corporate Contractor (Mandatory)

*** Contractor's Social Security Number
(Voluntary) or Federal Identification Number

Print Name:_____

By: _____
Corporate Officer
(Mandatory, if applicable)

Date: _____

Print Name:_____

* The provision in this Certification relating to child support applies only when the Contractor is an individual.

** Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

*** Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CITY OF NEWTON, MASSACHUSETTS

PAYMENT BOND

Know All Men By These Presents:

That we, _____, as PRINCIPAL, and _____, as SURETY, are held and firmly bound unto the City of Newton as Obligee, in the sum of dollars (\$_____) to be paid to the Obligee, for which payments well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the said PRINCIPAL has made a contract with the Obligee, bearing the date of _____, 2014, for the construction of _____ in Newton, Massachusetts.
(Project Title)

Now, the conditions of this obligation are such that if the PRINCIPAL and all Sub-contractors under said contract shall pay for all labor performed or furnished and for all materials used or employed in said contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said contract that may hereafter be made, notice to the SURETY of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, provisions of M.G.L. c.30, §39A, and M.G.L. c.149, §29, as amended, then this obligation shall become null and void; otherwise it shall remain in full force, virtue and effect.

In Witness Whereof, the PRINCIPAL and SURETY have hereto set their hands and seals this ____ day of _____ 2014.

PRINCIPAL

SURETY

BY _____

BY _____

(SEAL)

(ATTORNEY-IN-FACT) (SEAL)

(Title)

ATTEST: _____

ATTEST: _____

CITY OF NEWTON

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

1.0 DEFINITIONS

1.1 THE CONTRACT DOCUMENTS

The term "Contract Documents" sometimes also referred to as the "Contract", means the contract entered into between the City of Newton (hereinafter "City") and the Contractor. It includes the Invitation for Bid, General Bid Form, Contract Form, these General Conditions of the Contract, Supplements and Amendments to the General Conditions (if any), Contract Specifications, Drawings, all addenda issued prior to execution of the contract, the Bid Bond, the Labor and Material Payment Bond, or other assurances of completion, the applicable wage rate determinations, and other documents listed in the Agreement and modifications issued after execution of the contract.

1.2 THE WORK

The term "Work", sometimes also referred to as the "Project", means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligation.

1.3 OWNER

The term "Owner" is the City of Newton.

1.4 CONTRACT OFFICER

The term "Contract Officer" means the person appointed by the Owner to administer the terms of the Contract between the Owner and the Contractor, who is also empowered to take certain actions under this Agreement.

1.5 CONTRACTOR

1.5.1 The Contractor, sometimes referred to as the General Contractor, is the person or entity identified as such throughout the Contract Documents as if singular in number. The term Contractor means the Contractor or its authorized representative.

1.5.2 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract.

1.6 SUBSTANTIAL COMPLETION

The term "Substantial Completion" means the value of the work remaining to be performed by the Contractor is, in the estimate of the awarding authority, less than one percent (1%) of the original contract price.

2.0 CONTRACT ADMINISTRATION

2.1 PRE-CONSTRUCTION CONFERENCE

2.1.1 Prior to commencement of the Work, the Contractor shall meet in conference with representatives of the Owner regarding the Owner's requirements under the Contract for administration of the quality assurance program, safety program, labor provisions, the schedule of work, and other Contract procedures.

2.1.2 The Contractor shall begin work upon receipt of a written Notice to Proceed from the Contract Officer or designee. The Contractor shall not begin work prior to receiving such notice.

2.2 CONTRACT PERIOD

The Contractor shall complete all work required under this contract within the timeframe specified elsewhere in this document, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

2.3 REJECTION OF DEFECTIVE MATERIALS AND WORK

The Owner's inspection of the Work shall not relieve the Contractor of any of its responsibilities to fulfill the Contract obligations, and defective work shall be corrected without cost to the Owner. Unsuitable work may be rejected by the Owner, notwithstanding that such work and materials have been previously overlooked or misjudged by the Owner and accepted for payment. If the Work or any part thereof shall be found defective at any time before the final acceptance of the whole Work, the Contractor shall forthwith correct such defect in a manner satisfactory to the Owner, and if any material brought upon the site for use in the Work, or selected for the same, shall be rejected by the Owner as unsuitable or not in conformity with the Contract requirements, the Contractor shall forthwith remove such materials from the vicinity of the Work.

2.4 CHANGES

2.4.1 All changes in the work including any increase, decrease, or other equitable adjustment in the Contract price or in the time for performing the Contract, shall be authorized in writing by the Owner and/or Contract Officer prior to commencement.

2.5 PAYMENTS

2.5.1 CONTRACT PRICE

The Contract Price is stated in the Contract Form, and including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

2.6 APPLICATIONS FOR PAYMENT

2.6.1 Once each month, on a date established by the Owner at the beginning of the Work, the Contractor shall deliver to the Owner an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Owner may require, and reflecting a minimum of 5% retainage until the final acceptance and payment by the Owner.

2.6.2 The Owner shall make payment to the Contractor within 30 days of receipt of said application, less any applicable retainage.

2.6.3 The Owner may make changes in any application for payment submitted by the Contractor for:

- i. Retention based on the value of its claims against the Contractor,
- ii. Retention of 5% of the approved amount of the Application for Payment.

2.7 FINAL PAYMENT

The acceptance by the Contractor of the last payment due under this Contract or the execution of the Final Certificate of Completion, shall operate as a release to the Owner from all claims and liability related to this Contract.

2.8 GUARANTY AND WARRANTY

2.8.1 WARRANTY

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2.8.2 GENERAL GUARANTY

If at any time during the period of one (1) year from the date of Substantial Completion of the Work to be performed under this Contract, any part of the Work shall, in the reasonable determination of the Owner, require replacing or repairing due to the fact that it is broken, defective, or otherwise does not conform to the Contract Documents, the Owner will notify the Contractor to make the required repairs or replacement. If the Contractor shall neglect to commence such repairs or replacement to the satisfaction of the Owner within ten (10) days from the date of giving or mailing such notice, then the Owner may employ other persons to make the same. The Contractor agrees, upon demand, to pay to the Owner all amounts which the Owner expends for such repairs or replacements. During this one year guarantee period any corrective work shall be performed in accordance with the applicable terms of this Contract. For items of work completed after use and occupancy has been taken, the one year guarantee shall commence at the time the Owner accepts such items. This one year guarantee shall not limit any express guaranty or warranty provided elsewhere in the Contract.

2.9 INSURANCE REQUIREMENTS

2.9.1 The Contractor shall provide insurance coverage as listed below. This insurance shall be provided at the Contractor's expense and shall be in full force and effect during the full term of this Contract.

WORKER'S COMPENSATION

Worker's Compensation: Per M.G.L. c.. 149, s. 34 and c.. 152 as amended.

COMMERCIAL GENERAL LIABILITY

Personal Injury	\$500,000 each occurrence \$1,000,000 aggregate
Property Damage	\$500,000 each occurrence \$1,000,000 aggregate

VEHICLE LIABILITY

Personal Injury	\$500,000 each person \$1,000,000 aggregate
Property Damage	\$300,000

2.9.2 OWNER AS CO-INSURED

The Owner shall be named as additional insureds on the Contractor's Liability Policies.

2.9.3 CERTIFICATES OF INSURANCE, POLICIES

- i. The Contractor shall not commence the work until proof of compliance with this Section 2.9 has been furnished to the Owner by submitting one copy of a properly endorsed insurance certificate issued by a company authorized to write insurance in the Commonwealth. This certificate shall indicate that the contractual liability coverage is in force.
- ii. The Contractor shall file the original and one certified copy of all policies with the Owner within fifteen (15) days after contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to so notify the Owner, then the Contractor shall be responsible for all reasonable costs attributable thereto.

2.9.4 CANCELLATION

Cancellation of any insurance required by this contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given by the party proposing cancellation to the other party and Owner at least thirty days prior to the effective date thereof, which shall be expressed in said notice.

2.10 INDEMNIFICATION

The Contractor shall take all responsibility for the Work and take all precautions for preventing injuries to persons and property in or about the Work; shall bear all losses resulting to or on account of the amount or character of the Work. The Contractor shall pay or cause payment to be made for all labor performed or furnished and for all materials used or employed in carrying out this Contract. The Contractor shall assume the defense of, and indemnify and save harmless the Owner, and the Owner's officers and agents from all claims relating to labor performed or furnished and materials used or employed for the Work; to inventions, patents and patent rights used in and in doing the Work unless such patent infringement is due to a product or process specified by the

Owner; to injuries to any person or corporation received or sustained by or from the Contractor and any employees, and subcontractors and employees, in doing the work, or in consequence of any improper materials, implements or labor used or employed therein; and to any act, omission or neglect of the Contractor and any employees therein.

2.11 BONDS

The Contractor shall provide the Owner with a payment or labor and materials bond in the form provided by the Owner, executed by a surety company licensed by the Commonwealth of Massachusetts' Division of Insurance. Such bond shall be in an amount equal to at least one half of the Contract price unless otherwise stated in the Contract Documents. All bonds shall be accompanied by a current power of attorney.

2.12 TERMINATION

2.12.1 TERMINATION FOR CAUSE

The Owner may terminate this contract for cause if it determines that any of the following circumstances have occurred:

- a. The Contractor is adjudged bankrupt or has made a general assignment for the benefit of its creditors.
- b. A receiver has been appointed of the Contractor's property.
- c. All or a part of the Work has been abandoned.
- d. The Contractor has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Owner, except as provided in the Contract.
- e. The Owner has determined that the rate of progress required on the project is not being met.
- f. The Contractor has substantially violated any provisions of this Contract.

ii. The Owner may complete the Work, or any part thereof, and charge its expense of so completing the Work or part thereof, to the Contractor.

iii. The Owner may take possession of and use any materials, machinery, implements and tools found upon the site of said Work. The Owner shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the Contractor shall be solely responsible for their removal from the Project site after the Owner has no further use for them.

2.12.2 TERMINATION - NO FAULT

i. In the event that this Contract is terminated by the Owner, prior to the completion of construction and termination is not based on a reason listed in Paragraph 2.12.1, the Contractor shall be compensated for its costs incurred on the Project, including reasonable costs of de-mobilization, covering the period of time between the last approved application for payment and the date of termination.

ii. Payment by the Owner pursuant to Section 2.7 shall be considered to fully compensate the Contractor for all claims and expenses and those of any consultants, subcontractors, and suppliers, directly or indirectly attributable to the termination, including any claims for lost profits.

2.13 PERMITS, FEES, AND NOTICES

2.13.1 The Contractor shall secure and the Owner shall pay for the building permit, if required. The Contractor shall coordinate all efforts required to obtain this permit. All other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work shall be secured and paid for by the Contractor.

2.13.2 The Contractor shall comply with and give notices required by laws, ordinances rules, regulations, and lawful orders of public authorities bearing on performance of the Work.

- 2.13.3 If the Contractor performs Work that it knows or reasonably should know is contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

2.14 SAFETY REQUIREMENTS

- 2.14.1 The Contractor shall comply with all Federal, State, and local safety laws and regulations applicable to the Work performed under this Contract.

2.15 TEMPORARY HEATING

The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to properly protect all work materials against damage by dampness and cold, to dry out the Work, and to facilitate the completion of the Work. Any permanent heating equipment used shall be turned over to the City in the condition and at the time required by the specifications.

2.16 AVAILABILITY AND USE OF UTILITY SERVICES

- 2.16.1 The City shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the Contract. Unless otherwise provided in the Contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the City or, where the utility is produced by the City, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.
- 2.16.2 The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the Work by the City, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

2.17 DISPUTES

- 2.17.1 "Claim," as used in this section, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the Contract, unlike a claim relating to the Contract, is a claim that can be resolved under a Contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this section, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- 2.17.2 All disputes arising under or relating to this Contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this section.
- 2.17.3 All claims by the Contractor shall be made in writing and submitted to the Contract Officer for a written decision. A claim by the City against the Contractor shall be subject to a written decision by the Contract Officer.
- 2.17.4 The Contract Officer shall, within thirty (30) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- 2.17.5 The Contract Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the City, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within thirty (30) days after receipt of the Contract Officer's decision.
- 2.17.6 The Contractor shall proceed diligently with performance of this Contract and/or any authorized change thereof, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the Contract and/or any authorized change thereof, and comply with any decision of the Contract Officer.

2.18 LIQUIDATED DAMAGES

- 2.18.1 If the Contractor fails to complete the Work within the time specified in the contract, or any extension thereof, the Contractor shall pay to the City as liquidated damages, the sum of \$50.00 for each day of delay. If different completion dates are specified in the Contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.
- 2.18.2 If the City terminates the Contractor's right to proceed pursuant to section 2.12.1, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the Work together with any increased costs to the City in completing the Work.
- 2.18.3 If the City does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the Work is completed or accepted.

3.0 SALES TAX EXEMPTION AND OTHER TAXES

- 3.0.1 To the extent that materials and supplies are used or incorporated in the performance of this Contract, the Contractor is considered an exempt purchaser under the Massachusetts Sales Act, Chapter 14 of the Acts of 1966.
- 3.0.2 The Contractor shall be responsible for paying all other taxes and tariffs of any sort, related to the Work.

3.1 PROHIBITION AGAINST LIENS

The Contractor is prohibited from placing a lien on the City's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

3.2 ORDER OF PRECEDENCE

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the Contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

3.3 EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS

The City of Newton shall, until three (3) years after final payment under this Contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this Contract for the purpose of making audit, examination, excerpts, and/or transcriptions.

END OF THIS SECTION

CITY OF NEWTON

SPECIAL CONDITIONS OF THE CONTRACT FOR PUBLIC WORKS CONSTRUCTION

The following Special Conditions supplement the City of Newton General Conditions of the Contract for Public Works Construction. The following clauses relate in particular to this contract. In the event of conflict or ambiguity between the General Conditions and these Special Conditions, the Special Conditions take precedence and shall govern.

1. The Contractor shall provide such police officers as the Owner's Representative deems necessary for the direction and control of traffic entering, passing through and leaving the site of the contract. Such officers shall wear regulation policemen's uniforms and fluorescent safety vests. The City will reimburse the Contractor for payments made for the services of all traffic officers. The Contractor is required to submit to the Owner's Representative copies of evidence of payment.
2. Unless otherwise specified elsewhere in this contract or specifically directed by the Owner's Representative, all excavated material shall be wasted off-site at the Contractors' expense. No City of Newton disposal area will be available for this purpose.
3. The Contractor shall make his own arrangements with the owners of land other than the City easements occupied by or used by him in the prosecution of this contract and shall hold the City harmless from any and all claims for damages caused by or arising from such occupation or use. All temporary roadways built to accommodate equipment, trucks, etc., shall be built at the Contractor's own expense.
4. The City does not guarantee the locations of existing pipes or underground conduits. The locations of these structures shown on the plans are approximate. In private lands where sprinkler systems, driveway, walk and step heating cables and/or heating pipes are encountered, the Contractor shall use due caution when excavating in the vicinity of these structures.
5. The City does not guarantee the nature of any material encountered in any excavation. The Contractor must make his own examination, by boring, test holes, or otherwise, for determining the nature of the material to be excavated or the conditions under which the work is to be performed, and make his bid in sole reliance thereon.
6. The Contractor shall clean up the entire project before the City will accept the work. All rubbish, tree stumps, boulders from any excavation, surplus excavated material, unless specifically ordered by the Owner's Representative to do otherwise, or any other debris shall be disposed of by the Contractor. The entire area within the easements and all other areas disturbed by the Contractor shall be graded and left in a condition comparable to that as found originally and satisfactory to the Owner's Representative. All the work mentioned in this paragraph shall be included in the Furnishing, Trenching and Laying Item.
7. All trenches and areas resurfaced by the Contractor shall be guaranteed against settlement, upheaval or failure of any kind for a period of one (1) year after the City accepts the work and he shall replace such resurfacing at his own expense. The City Owner's Representative shall be sole judge as to what constitutes a failure and which portion of the resurfacing is to be replaced, and his decision shall be final.
8. Before starting the work and from time to time during its progress, as the Owner's Representative may request, the Contractor shall submit to the Owner's Representative a written description of the methods he plans to use in doing the work and the various steps he intends to take.
9. The terms "earth excavation" and "excavation" used throughout these specifications shall include all the material to be excavated and/or removed (except rock excavation) including peat, muck, roots, trees, stumps, and all other material necessary for the completion of the work to be done as specified.
10. The term "complete in place" used throughout these specifications shall include all the work to be done for the completion of the item as specified.

11. The Contractor shall cooperate with other Contractors, Utility Companies and/or City of Newton Departments that may be working on or near the work site covered by the contract. The Owner's Representative will decide as to the respective rights of the parties involved and his decisions shall be final.
12. The Contractor shall assume all liability, financial or otherwise, in connection with this contract and shall protect and save harmless the City of Newton for any and all damages or claims that may arise because of inconveniences, delays or loss experienced by him because of the presence and operations of other Contractors, Utility Companies and/or City of Newton Departments working near or within the limits of the contract.
13. The Contractor shall begin on receipt of written orders to do so, and the work once begun shall be continuously carried forward with a force of men adequate in the opinion of the Owner's Representative to complete the work in a reasonable and expeditious manner, inclement and unseasonable weather conditions excepted. In the event the Owner's Representative determines that the Contractor has not begun work on written orders to do so, or that the work once begun has been abandoned without authority, then the Owner's Representative shall give the Contractor seventy-two (72) hours notice (Sunday excepted) to begin work, or resume work in case of abandonment. Failure of the Contractor to act within this specified time shall be deemed a breach of this contract and the Contractor shall be held liable for any damage or expense arising from such breach of contract.
14. Upon commencement of the work the Contractor shall assume full charge and care thereof and he shall take every necessary precaution against injury or damage to the work by action of the elements, or from any cause whatever, whether arising from the execution or the non-execution of the contract. The Contractor shall bear all losses resulting to him on account of the amount or character of the work or because the nature of the land in or on which the work is done is different from what was estimated or expected, or on account of the weather elements or other causes.
15. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before the completion and final acceptance of the work, and shall bear the expense thereof.
16. All notices, demands, requests, instructions, approvals and claims must be in writing. Any such notice shall be deemed to have been given as of the time of delivery, or of actual receipt in the case of telegrams or, in the case of mailing, when it should have been received in due course of post. For communicating purposes, the office address of the Contractor shall be that stated on the signature page of the contract; that of the City shall be as stated in the Notice to Contractors. Any subsequent change in address of either party shall be communicated to the other in writing.
17. The City will furnish to the Contractor, without charge, all copies of the specifications reasonably necessary in the performance of the contract work.
18. The Contractor shall supply to the City the name and telephone number of a responsible person who may be contacted during off-hour emergencies on the project. The Contractor shall cooperate at all times with the City and the Project Manager, and ensure the cooperation of his key personnel and that of his subcontractors.
19. The work must be completed in a continuous uninterrupted operation. The Contractor must use sufficient men and adequate equipment to complete all the necessary work requirements within a minimum period of time. The work shall be conducted between the hours of 7:00 a.m. and 4:30 p.m. on Monday through Friday. No work shall be done on holidays, Saturdays or Sundays other than for emergencies, or unless specifically authorized by the City.
20. The Contractor shall, with each monthly invoice submitted during the term of this Contract, submit to the City two (2) legible copies of his payrolls documenting the wages paid to all employees performing on site labor relating to the work of this Contract. These copies shall be prepared on forms supplied by the City.
21.
 - a.) Unless specifically so stated to the contrary the use of a manufacturer's name or style number is not restrictive, and is intended solely as an identification of the type and quality of the materials and services required. In all cases, the words "or approved equal" if not inserted are implied.
 - b.) An item equal to that named or described in the specifications may upon written approval of the City be furnished by the Contractor. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased; (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.
 - c.) The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, prior to purchase, use or fabrication of such items. Subject to the provisions of M.G.L. Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the

decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Contractor's expense.

- d.) For the use of material other than the one specified, the Contractor shall assume the cost of and responsibility for satisfactorily accomplishing all changes in the work as shown. All directions, specifications and recommendations by manufacturers for the installation, handling, storing, adjustment, and operation of their equipment shall be complied with and responsibility for proper performance shall continue to rest with the Contractor.
 - e.) Except as otherwise provided for by the provisions of M.G.L. Ch. 30, Sec. 39J, the Contractor shall not have any right of appeal from the decision of the City condemning any materials furnished if the Contractor fails to obtain the approval for substitution in accordance with these provisions. If any substitution is more costly, the Contractor shall pay for such costs
22. In addition to other guarantees or warranties required under law or other sections of the specification, the Contractor warrants all materials furnished and labor performed under this Contract to be free from defects or errors in workmanship or installation for a period of one year from the date of Completion of the work, as certified by the Project Manager. The Contractor shall indemnify the City of Newton for the full cost of any damage to the property that may result by reason of such defects or errors and shall indemnify the City of Newton from and against any and all claims, demands, losses, costs, expenses, liabilities and damages, including reasonable attorney's fees and expenses, arising out of or on account of this Contract, including but not limited to claims brought against the City of Newton for alleged infringement of patents based upon any methods of construction or application of upon materials furnished under the Contract.
23. The Contractor shall make no excavation in any public way or utility easement unless at least forty-eight (48) hours, exclusive of Saturdays, Sundays and legal holidays, before the proposed excavation is to be made, he has given notice in writing by registered mail, of the proposed excavation to such Public Utility Companies as supply gas, electricity and telephone service in the City, to such private companies as supply cable television service in the City and also to the City of Newton Water Department. Such notice shall set forth the name of the street and a reasonably accurate description of the location in which the excavation is to be made. The Contractor shall comply with the Dig Safe Law (G.L. c. 82, Sec. 40).
24. The Contractor shall exercise the greatest of care to ensure that no material being hauled either to or from the site by him or his sub-contractor's, is spilled onto any way, public or private, within the City limits. In the event that such spillage does occur, it shall be the Contractors' responsibility to remove the spilled material and clean the area by the end of the work day. If in the judgment of the Owner's Representative, the Contractor has not satisfactorily cleaned the area of any spill, the Owner's Representative may then order the area to be cleaned by the City at the Contractors' expense.
25. No cement concrete shall be poured after October 30, unless the Contractor receives prior written authority to do so from the Commissioner of Public Works.

END OF THIS SECTION

GENERAL PROVISIONS

1.0 PROJECT SITE

- A. The area of work shall be the EMERSON PLAYGROUND, Pettee Street, Newton, MA.

2.0 TIME FOR COMPLETION

- A. The work shall be commenced at the time stipulated in the Notice to Proceed to the Contractor. All work shall be fully completed by November 1, 2014 from the stipulated date.

3.0 PAYMENT

- A. Payment to the Contractor shall be made in accordance with the provisions of Paragraph 2.6 of the General Conditions. The amount of retainage established for this contract shall be 5%.

4.0 LIQUIDATED DAMAGES

- A. As actual damages for any delay in completion are impossible to determine, the Contractor and his/her sureties shall be liable for and shall pay fifty dollars (\$50.00) as fixed, and agreed liquidated damages for each calendar day of delay beyond the completion date stated in the Notice to Proceed until the work is brought to full and accepted completion.

5.0 COMMUNICATIONS

- A. All notices, demands, requests, instructions, approvals and claims must be in writing.
- B. Any such notice shall be deemed to have been given as of the time of delivery, or of actual receipt in the case of telegrams or, in the case of mailing, when it should have been received in due course of post.
- C. For communicating purposes, the office address of the Contractor shall be that stated on the signature page of the contract; that of the City shall be as stated in the Notice to Contractors. Any subsequent change in address of either party shall be communicated to the other in writing.

6.0 PLANS AND SPECIFICATIONS

- A. The City will furnish to the Contractor, without charge, all copies of the specifications reasonably necessary in the performance of the contract work.

7.0 COORDINATION

The Contractor shall:

- A. Supply to the City the name and telephone number of a responsible person who may be contacted during off-hour emergencies on the project.
- B. Cooperate at all times with the City and the Project Manager, and ensure the cooperation of his key personnel and that of his subcontractors.
- C. Provide 24 hour minimum notice to building management to prepare for access to any site area.

8.0 CONDUCT OF THE WORK

- A. The work must be completed in a continuous uninterrupted operation. The Contractor must use sufficient men and adequate equipment to complete all the necessary work requirements within a minimum period of time.

- B. The work shall be conducted between the hours of 8:00 a.m. and 4:30 p.m. on Monday through Friday. No work shall be done on holidays, Saturdays or Sundays other than for emergencies, or unless specifically authorized by the City.
- C. The Contractor is responsible for the security of partially completed work until the project is finally accepted by the City.

9.0 ALTERATION

- A. The Contractor shall patch, repair and/or replace all existing materials and surfaces remaining exposed after installation of new work which have been affected by alteration or removal of existing work. All patch and repair work shall match existing.

10.0 GENERAL DIRECTIONS

- A. Damage to Persons and Property

Any damage to buildings, roads, public roads, bituminous concrete areas, fences, lawn areas, trees, shrubbery, electric or telephone poles, underground utilities, etc., shall be repaired by the Contractor at his own expense. Damaged property shall be returned to its original condition prior to the damages within a reasonable time period, except all utility outages shall be repaired immediately.

- B. Protection of Persons and Property

The Contractor shall, at all times, leave an unobstructed way along the roadways and walks, and shall maintain barriers and lights for the protection of all persons and property in all locations where he has materials stored or work going on, and during the entire time such work is going on or material is stored.

- C. The Contractor shall at the end of each work day leave the fields in usable condition. There shall be no open holes/trenches or exposed irrigation heads that could pose a trip hazard or potential injury to persons using the fields.

- D. Care of Work

All work is to be carefully protected so that no injury will come to it from water, frost, accident, or any other cause and any injury which may come to any of the work shall be repaired immediately by the Contractor at his own expense and without additional cost to the City. This shall also apply to any abutting or adjoining work on premises. The Contractor shall be responsible for any damage and in the event of such damage, the Contractor shall repair the damage immediately at his own cost and without additional cost to the City.

- E. Removal of Debris

Debris of any nature shall be completely removed from the site at the end of each days work and disposed of in accordance with all Federal, State and local regulations.

- F. The Contractor is responsible for the security of all work until it is accepted by the City.

11.0 TEMPORARY UTILITIES

- A. While the work is being carried out the Authority will provide electricity for small tools and lighting. Toilet facilities for use by the Contractor's employees shall be provided by the BHA and maintained in a sanitary condition by the Contractor.

12.0 SUBMISSION OF PAYROLLS

- A. The Contractor shall, with each monthly invoice submitted during the term of this Contract, submit to the City two (2) legible copies of his payrolls documenting the wages paid to all employees performing on site labor relating to the work of this Contract. These copies shall be prepared on forms supplied by the City.

13.0 DRAWINGS

- A. The drawings attached herein and such drawings as may be issued per addendum, shall constitute an integral part of this section and shall serve as the working drawings.
- B. Drawings shall not be scaled. Field verification is directed since actual locations, dimensions and levels are existing.
- C. All items not specifically mentioned in the specifications or noted on the drawings, but which are obviously necessary to make a complete working installation, shall be included.

14.0 MATERIALS

- A. Unless specifically so stated to the contrary the use of a manufacturer's name or style number is not restrictive, and is intended solely as an identification of the type and quality of the materials and services required. In all cases, the words "or approved equal" if not inserted are implied.
- B. An item equal to that named or described in the specifications may upon written approval of the City be furnished by the Contractor. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased; (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.
- C. The name and identification of all materials other than the one specifically named shall be submitted to the City in writing for approval, prior to purchase, use or fabrication of such items. Subject to the provisions of M.G.L. Ch. 30, Sec. 39J, approval shall be at the sole discretion of the City, shall be in writing to be effective, and the decision of the City shall be final. The City may require tests of all materials so submitted to establish quality standards at the Contractor's expense.
- D. For the use of material other than the one specified, the Contractor shall assume the cost of and responsibility for satisfactorily accomplishing all changes in the work as shown. All directions, specifications and recommendations by manufacturers for the installation, handling, storing, adjustment, and operation of their equipment shall be complied with and responsibility for proper performance shall continue to rest with the Contractor.
- E. Except as otherwise provided for by the provisions of M.G.L. Ch. 30, Sec. 39J, the Contractor shall not have any right of appeal from the decision of the City condemning any materials furnished if the Contractor fails to obtain the approval for substitution in accordance with these provisions. If any substitutuin is more costly, the Contracotr shall pay for such costs

15.0 WARRANTY AND INDEMNIFICATION

- A. In addition to other guarantees or warranties required under law or other sections of the specification, the Contractor warrants all materials furnished and labor performed under this Contract to be free from defects or errors in workmanship or installation for a period of one year from the date of Completion of the work, as certified by the Project Manager. The Contractor shall indemnify the Authority for the full cost of any damage to the property that may result by reason of such defects or errors and shall indemnify the Authority from and against any and all claims, demands, losses, costs, expenses, liabilities and damages, including reasonable attorney's fees and expenses, arising out of or on account of this Contract, including but not limited to claims brought against the Authority for alleged infringement of patents based upon any methods of construction or application of upon materials furnished under the Contract.

END OF THIS SECTION

CITY OF NEWTON

SUMMARY OF WORK AND SPECIFIC REQUIREMENTS OF THE CONTRACT FOR PUBLIC WORKS CONSTRUCTION

I. SUMMARY OF WORK

A. The Work under the Contract References **Plan No. #14-142** and consists of:

1. Site preparation, installation of a new playground with resilient safety surfacing, new play equipment and swing, installation of new site furnishings, new vinyl coated chain link fencing, new seeded lawn and trees, leaching galleys and drainage piping, bituminous concrete walks, concrete pads and precast concrete curb.
2. All other work described in the Project Manual and/or shown on the Plan(s) unless specifically indicated is not to be done.

B. In addition the work under the contract includes:

1. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
2. All labor, materials, tools, and equipment necessary to do all the work required for the completion of each item as specified, which shall limited not only to the exact intent mentioned, but shall include incidental work necessary or customarily performed for the completion of that item.
3. All items not specifically mentioned or noted in the Project Manual and/or Plan(s), but which are obviously necessary to make a complete working installation.

C. The Proposed Contract Price shall be complete costs, including overhead, profit, insurance, transportation, and all other costs connected with, or incidental to the work described.

II. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

A. Upon notification the Contractor shall commence the work specified in the Project Manual as directed by the City. The work shall proceed in a continuous uninterrupted fashion with adequately staffed crews, in a satisfactory manner, which will assure that the work is completed in a timely manner to the satisfaction of the City.

B. The time for substantial completion pursuant to **Article 2** of the **Contract** shall be ninety (90) calendar days.

Time is of the essence for the completion of this contract. If the Contractor fails to achieve substantial or final completion of the Work within the time required by the contract, and unless an extension of time is granted, the Contractor shall pay to the City as liquidated damages, the applicable amount specified in **Article 6** of the **General Conditions** for each day of delay. If different completion dates are specified in the Contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.

III. INSURANCE REQUIREMENTS

- A. The Contractor shall carry and maintain until acceptance of the work such Workmen's Compensation , Automobile Liability, Commercial General Liability, Contingent Commercial General Liability, Property Damage and Contingent Property Damage Insurance, each including blasting coverage, as shall protect him and any sub-contractor performing work covered by this contract from all claims and liability for damages for personal injury, including accidental death, and for property damage which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or by any one directly or indirectly employed by either of them.
- B. The City shall be named as an additional insured on such policy.
- C. The amounts of such insurance shall be as follows:
 - 1. Workmen's Compensation Insurance as required by Massachusetts General Law.
 - 2. Automobile Liability Insurance on all vehicles owned or hired for a.) Bodily Injury in an amount not less than \$500,000.00 for each occurrence, and not less than \$1,000,000.00 aggregate; b.) Property Damage in an amount not less than \$250,000.00 each occurrence, and not less than \$500,000.00 aggregate.
 - 3. Commercial General Liability Insurance and Contingent Commercial General Liability Insurance in an amount not less than \$500,000.00 for injuries, including accidental death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of one accident.
 - 4. Property Damage Insurance and Contingent Property Damage Insurance in an amount not less than \$250,000.00 on account of one accident, and in an amount of not less than \$500,000.00 on account of all accidents.
 - 5. General Liability Insurance shall include Contractual Liability Insurance.
- D. Before any work is started, the successful bidder shall be required to file with the Chief Procurement Officer certificates of insurance coverage as detailed above, with policy numbers and dates of expiration.
- E. The Contractor shall indemnify, hold harmless and defend the City and its departments, officers, employees, servants, and agents from and against all actions, causes of actions, claims, demands, damages, costs, loss of services, expenses and compensation, including attorney's fees and interest arising out of or resulting directly or indirectly from the services rendered pursuant to this Contract, provided that any such action, cause of action, claim, demand, damage, cost, loss of service, expense, compensation (1) in any way grows out of bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, which (2) is caused in whole or in part by any act or omission of the Contractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

END OF THIS SECTION

CITY OF NEWTON
WAGE RATE REQUIREMENTS

1. GENERAL

- A. This section summarizes the requirements for the payment of wages to laborers and mechanics employed under the Contract.
- B. Other duties and requirements of law which may not be specified in this section apply and are inherently a part of the Contract.

2. WAGE RATES

- A. The rate per hour to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers employed on the Work shall not be less than the rate of wages in the attached "Minimum Wage Rates" as determined by the Commissioner of Labor and Industries. This schedule shall continue to be the minimum rate of wages for said employees during the life of this Contract.
- B. Keep posted on the site a legible copy of said schedule. Keep on file the wage rates and classifications of labor employed on this Work in order that they may be available for inspection by the Owner, Administrator, or the Architect.
- C. Apprentices employed pursuant to this determination of wage rates must be registered and approved by the State Apprenticeship Council wherever rates for journeymen or apprentices are not listed.
- D. Pay reserve police officers employed on the Work the prevailing rate of wages paid to regular police officers as required by M.G.L. c149, Sec. 34B, as amended. Such police officers shall be covered by Workmen's Compensation Insurance and Employers Liability Insurance by the Contractor.
- E. The Contractor and all subcontractors shall, on a weekly basis throughout the term of the contract, provide to the City of Newton certified payroll affidavits verifying compliance with M.G.L. c.149, Sec. 27, 27A and 27B. The Contractor is obligated to provide such records to the City directly on a weekly basis. The City may assess a penalty of \$100 for each day beyond the required submission date that such records are received, which amount shall be deducted from any amounts to the Contractor from the City. In the event of chronic late submissions, the City shall report the same to the Office of the Attorney General.
- F. The Contractor and all subcontractors shall provide a Statement of Compliance within 15 days of the completion of its portion of the work. This statement shall be submitted to the Owner on the form found elsewhere in this section.
- G. The Contractor shall maintain accurate and complete records, including payroll records, during the Contract term and for three years thereafter.

END OF SECTION



DEVAL L. PATRICK
Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H

RACHEL KAPRIELIAN
Secretary
HEATHER E. ROWE
Director

Awarding Authority: City of Newton
Contract Number: #14-142 City/Town: NEWTON
Description of Work: Improvements to Emerson Playground - Rehabilitation of the children's play area.
Job Location: Pettee Street

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **If an apprentice rate is not listed on the prevailing wage schedule for the trade in which an apprentice is registered with the DAS, the apprentice must be paid the journeyworker's rate for the trade.**
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	06/01/2014	\$32.40	\$9.41	\$8.80	\$0.00	\$50.61
	08/01/2014	\$32.40	\$9.91	\$8.80	\$0.00	\$51.11
	12/01/2014	\$32.40	\$9.91	\$9.33	\$0.00	\$51.64
	06/01/2015	\$32.75	\$9.91	\$9.33	\$0.00	\$51.99
	08/01/2015	\$32.75	\$10.41	\$9.33	\$0.00	\$52.49
	12/01/2015	\$32.75	\$10.41	\$10.08	\$0.00	\$53.24
	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
	08/01/2016	\$33.25	\$10.91	\$10.08	\$0.00	\$54.24
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
	06/01/2014	\$32.47	\$9.41	\$8.80	\$0.00	\$50.68
	08/01/2014	\$32.47	\$9.91	\$8.80	\$0.00	\$51.18
	12/01/2014	\$32.47	\$9.91	\$9.33	\$0.00	\$51.71
	06/01/2015	\$32.82	\$9.91	\$9.33	\$0.00	\$52.06
	08/01/2015	\$32.82	\$10.41	\$9.33	\$0.00	\$52.56
	12/01/2015	\$32.82	\$10.41	\$10.08	\$0.00	\$53.31
	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
	06/01/2014	\$32.59	\$9.41	\$8.80	\$0.00	\$50.80
	08/01/2014	\$32.59	\$9.91	\$8.80	\$0.00	\$51.30
	12/01/2014	\$32.59	\$9.91	\$9.33	\$0.00	\$51.83
	06/01/2015	\$32.94	\$9.91	\$9.33	\$0.00	\$52.18
	08/01/2015	\$32.94	\$10.41	\$9.33	\$0.00	\$52.68
	12/01/2015	\$32.94	\$10.41	\$10.08	\$0.00	\$53.43
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54.43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
	08/01/2013	\$84.21	\$9.80	\$18.17	\$0.00	\$112.18
	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
AIR TRACK OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	06/01/2014	\$31.58	\$10.40	\$5.95	\$0.00	\$47.93
	12/01/2014	\$32.48	\$10.40	\$5.95	\$0.00	\$48.83
	06/01/2015	\$33.43	\$10.40	\$5.95	\$0.00	\$49.78
	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ASPHALT RAKER LABORERS - ZONE 1	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER LABORERS - ZONE 1	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER LABORERS - ZONE 1	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2010	\$37.70	\$6.97	\$11.18	\$0.00	\$55.85

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2010

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
2	65	\$24.51	\$6.97	\$11.18	\$0.00	\$42.66
3	70	\$26.39	\$6.97	\$11.18	\$0.00	\$44.54
4	75	\$28.28	\$6.97	\$11.18	\$0.00	\$46.43
5	80	\$30.16	\$6.97	\$11.18	\$0.00	\$48.31
6	85	\$32.05	\$6.97	\$11.18	\$0.00	\$50.20
7	90	\$33.93	\$6.97	\$11.18	\$0.00	\$52.08
8	95	\$35.82	\$6.97	\$11.18	\$0.00	\$53.97

Notes:

Apprentice to Journeyworker Ratio:1:5

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 (NEWTON)	02/01/2014	\$48.06	\$10.18	\$18.15	\$0.00	\$76.39
	08/01/2014	\$48.96	\$10.18	\$18.22	\$0.00	\$77.36
	02/01/2015	\$49.52	\$10.18	\$18.22	\$0.00	\$77.92
	08/01/2015	\$50.42	\$10.18	\$18.29	\$0.00	\$78.89
	02/01/2016	\$50.99	\$10.18	\$18.29	\$0.00	\$79.46
	08/01/2016	\$51.89	\$10.18	\$18.37	\$0.00	\$80.44
	02/01/2017	\$52.46	\$10.18	\$18.37	\$0.00	\$81.01

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Newton

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.03	\$10.18	\$18.15	\$0.00	\$52.36
2	60	\$28.84	\$10.18	\$18.15	\$0.00	\$57.17
3	70	\$33.64	\$10.18	\$18.15	\$0.00	\$61.97
4	80	\$38.45	\$10.18	\$18.15	\$0.00	\$66.78
5	90	\$43.25	\$10.18	\$18.15	\$0.00	\$71.58

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.48	\$10.18	\$18.22	\$0.00	\$52.88
2	60	\$29.38	\$10.18	\$18.22	\$0.00	\$57.78
3	70	\$34.27	\$10.18	\$18.22	\$0.00	\$62.67
4	80	\$39.17	\$10.18	\$18.22	\$0.00	\$67.57
5	90	\$44.06	\$10.18	\$18.22	\$0.00	\$72.46

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN LABORERS - FOUNDATION AND MARINE	06/01/2014	\$35.20	\$7.30	\$12.90	\$0.00	\$55.40
	12/01/2014	\$35.95	\$7.30	\$12.90	\$0.00	\$56.15
	06/01/2015	\$36.70	\$7.30	\$12.90	\$0.00	\$56.90
	12/01/2015	\$37.45	\$7.30	\$12.90	\$0.00	\$57.65
	06/01/2016	\$38.20	\$7.30	\$12.90	\$0.00	\$58.40
	12/01/2016	\$39.20	\$7.30	\$12.90	\$0.00	\$59.40

For apprentice rates see "Apprentice- LABORER"

CAISSON & UNDERPINNING LABORER LABORERS - FOUNDATION AND MARINE	06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
	12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
	06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
	12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
	06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
	12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
	12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
	06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
	12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
	06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
	12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2014	\$34.78	\$9.80	\$15.91	\$0.00	\$60.49
	09/01/2014	\$35.55	\$9.80	\$15.91	\$0.00	\$61.26
	03/01/2015	\$36.32	\$9.80	\$15.91	\$0.00	\$62.03

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.39	\$9.80	\$1.57	\$0.00	\$28.76
2	60	\$20.87	\$9.80	\$1.57	\$0.00	\$32.24
3	70	\$24.35	\$9.80	\$11.20	\$0.00	\$45.35
4	75	\$26.09	\$9.80	\$11.20	\$0.00	\$47.09
5	80	\$27.82	\$9.80	\$12.77	\$0.00	\$50.39
6	80	\$27.82	\$9.80	\$12.77	\$0.00	\$50.39
7	90	\$31.30	\$9.80	\$14.34	\$0.00	\$55.44
8	90	\$31.30	\$9.80	\$14.34	\$0.00	\$55.44

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.78	\$9.80	\$1.57	\$0.00	\$29.15
2	60	\$21.33	\$9.80	\$1.57	\$0.00	\$32.70
3	70	\$24.89	\$9.80	\$11.20	\$0.00	\$45.89
4	75	\$26.66	\$9.80	\$11.20	\$0.00	\$47.66
5	80	\$28.44	\$9.80	\$12.77	\$0.00	\$51.01
6	80	\$28.44	\$9.80	\$12.77	\$0.00	\$51.01
7	90	\$32.00	\$9.80	\$14.34	\$0.00	\$56.14
8	90	\$32.00	\$9.80	\$14.34	\$0.00	\$56.14

Notes:

Apprentice to Journeyworker Ratio:1:5

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (NEWTON)	01/01/2014	\$43.60	\$10.90	\$18.71	\$1.30	\$74.51
	07/01/2014	\$43.77	\$10.90	\$18.71	\$1.30	\$74.68
	01/01/2015	\$44.69	\$10.90	\$18.71	\$1.30	\$75.60
	07/01/2015	\$45.29	\$10.90	\$18.71	\$1.30	\$76.20
	01/01/2016	\$46.21	\$10.90	\$18.71	\$1.30	\$77.12

Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Newton)

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.80	\$10.90	\$12.21	\$1.30	\$46.21
2	60	\$26.16	\$10.90	\$13.71	\$1.30	\$52.07
3	65	\$28.34	\$10.90	\$14.71	\$1.30	\$55.25
4	70	\$30.52	\$10.90	\$15.71	\$1.30	\$58.43
5	75	\$32.70	\$10.90	\$16.71	\$1.30	\$61.61
6	80	\$34.88	\$10.90	\$17.71	\$1.30	\$64.79
7	90	\$39.24	\$10.90	\$18.71	\$1.30	\$70.15

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.89	\$10.90	\$12.21	\$1.30	\$46.30
2	60	\$26.26	\$10.90	\$13.71	\$1.30	\$52.17
3	65	\$28.45	\$10.90	\$14.71	\$1.30	\$55.36
4	70	\$30.64	\$10.90	\$15.71	\$1.30	\$58.55
5	75	\$32.83	\$10.90	\$16.71	\$1.30	\$61.74
6	80	\$35.02	\$10.90	\$17.71	\$1.30	\$64.93
7	90	\$39.39	\$10.90	\$18.71	\$1.30	\$70.30

Notes:

Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR LABORERS - ZONE 1	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4	12/01/2013	\$41.49	\$10.00	\$14.18	\$0.00	\$65.67
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2013	\$28.11	\$10.00	\$14.18	\$0.00	\$52.29
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DELEADER (BRIDGE) PAINTERS LOCAL 35 - ZONE 2	01/01/2014	\$45.91	\$7.85	\$16.10	\$0.00	\$69.86
	07/01/2014	\$46.76	\$7.85	\$16.10	\$0.00	\$70.71
	01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
	07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
	01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
	07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
	01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.96	\$7.85	\$0.00	\$0.00	\$30.81
2	55	\$25.25	\$7.85	\$3.66	\$0.00	\$36.76
3	60	\$27.55	\$7.85	\$3.99	\$0.00	\$39.39
4	65	\$29.84	\$7.85	\$4.32	\$0.00	\$42.01
5	70	\$32.14	\$7.85	\$14.11	\$0.00	\$54.10
6	75	\$34.43	\$7.85	\$14.44	\$0.00	\$56.72
7	80	\$36.73	\$7.85	\$14.77	\$0.00	\$59.35
8	90	\$41.32	\$7.85	\$15.44	\$0.00	\$64.61

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$7.85	\$0.00	\$0.00	\$31.23
2	55	\$25.72	\$7.85	\$3.66	\$0.00	\$37.23
3	60	\$28.06	\$7.85	\$3.99	\$0.00	\$39.90
4	65	\$30.39	\$7.85	\$4.32	\$0.00	\$42.56
5	70	\$32.73	\$7.85	\$14.11	\$0.00	\$54.69
6	75	\$35.07	\$7.85	\$14.44	\$0.00	\$57.36
7	80	\$37.41	\$7.85	\$14.77	\$0.00	\$60.03
8	90	\$42.08	\$7.85	\$15.44	\$0.00	\$65.37

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

DEMO: ADZEMAN LABORERS - ZONE 1	06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
	12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50

For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS - ZONE 1	06/01/2014	\$35.25	\$7.30	\$12.70	\$0.00	\$55.25
	12/01/2014	\$36.00	\$7.30	\$12.70	\$0.00	\$56.00
	06/01/2015	\$36.75	\$7.30	\$12.70	\$0.00	\$56.75
	12/01/2015	\$37.50	\$7.30	\$12.70	\$0.00	\$57.50

For apprentice rates see "Apprentice- LABORER"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DEMO: BURNERS LABORERS - ZONE 1	06/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	12/01/2014	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	06/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
	12/01/2015	\$37.25	\$7.30	\$12.70	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER LABORERS - ZONE 1	06/01/2014	\$35.25	\$7.30	\$12.70	\$0.00	\$55.25
	12/01/2014	\$36.00	\$7.30	\$12.70	\$0.00	\$56.00
	06/01/2015	\$36.75	\$7.30	\$12.70	\$0.00	\$56.75
	12/01/2015	\$37.50	\$7.30	\$12.70	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 1	06/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	12/01/2014	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	06/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
	12/01/2015	\$37.25	\$7.30	\$12.70	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER LABORERS - ZONE 1	06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
	12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2013	\$56.14	\$9.80	\$18.17	\$0.00	\$84.11
	08/01/2014	\$58.24	\$9.80	\$18.17	\$0.00	\$86.21
	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2013	\$40.10	\$9.80	\$18.17	\$0.00	\$68.07
	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2013	\$60.15	\$9.80	\$18.17	\$0.00	\$88.12
	08/01/2014	\$62.40	\$9.80	\$18.17	\$0.00	\$90.37
	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2013	\$84.21	\$9.80	\$18.17	\$0.00	\$112.18
	08/01/2014	\$87.36	\$9.80	\$18.17	\$0.00	\$115.33
	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
DRAWBRIDGE OPERATOR (Construction) ELECTRICIANS LOCAL 103	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53
For apprentice rates see "Apprentice- ELECTRICIAN"						
ELECTRICIAN ELECTRICIANS LOCAL 103	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - *ELECTRICIAN - Local 103*

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.78	\$13.00	\$0.53	\$0.00	\$31.31
2	40	\$17.78	\$13.00	\$0.53	\$0.00	\$31.31
3	45	\$20.00	\$13.00	\$11.04	\$0.00	\$44.04
4	45	\$20.00	\$13.00	\$11.04	\$0.00	\$44.04
5	50	\$22.23	\$13.00	\$11.37	\$0.00	\$46.60
6	55	\$24.45	\$13.00	\$11.70	\$0.00	\$49.15
7	60	\$26.67	\$13.00	\$12.03	\$0.00	\$51.70
8	65	\$28.89	\$13.00	\$12.37	\$0.00	\$54.26
9	70	\$31.12	\$13.00	\$12.69	\$0.00	\$56.81
10	75	\$33.34	\$13.00	\$13.03	\$0.00	\$59.37

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$18.05	\$13.00	\$0.54	\$0.00	\$31.59
2	40	\$18.05	\$13.00	\$0.54	\$0.00	\$31.59
3	45	\$20.30	\$13.00	\$11.05	\$0.00	\$44.35
4	45	\$20.30	\$13.00	\$11.05	\$0.00	\$44.35
5	50	\$22.56	\$13.00	\$11.38	\$0.00	\$46.94
6	55	\$24.82	\$13.00	\$11.71	\$0.00	\$49.53
7	60	\$27.07	\$13.00	\$12.04	\$0.00	\$52.11
8	65	\$29.33	\$13.00	\$12.38	\$0.00	\$54.71
9	70	\$31.58	\$13.00	\$12.71	\$0.00	\$57.29
10	75	\$33.84	\$13.00	\$13.05	\$0.00	\$59.89

Notes:

App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR
ELEVATOR CONSTRUCTORS LOCAL 4

01/01/2012 \$52.45 \$8.78 \$6.96 \$0.00 \$68.19

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2012

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.23	\$8.78	\$0.00	\$0.00	\$35.01
2	55	\$28.85	\$8.78	\$6.96	\$0.00	\$44.59
3	65	\$34.09	\$8.78	\$6.96	\$0.00	\$49.83
4	70	\$36.72	\$8.78	\$6.96	\$0.00	\$52.46
5	80	\$41.96	\$8.78	\$6.96	\$0.00	\$57.70

Notes:

Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER <i>ELEVATOR CONSTRUCTORS LOCAL 4</i>	01/01/2012	\$38.59	\$8.78	\$6.96	\$0.00	\$54.33
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"						
FENCE & GUARD RAIL ERECTOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice - LABORER"						
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$38.87	\$10.00	\$14.18	\$0.00	\$63.05
For apprentice rates see "Apprentice - OPERATING ENGINEERS"						
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$40.29	\$10.00	\$14.18	\$0.00	\$64.47
For apprentice rates see "Apprentice - OPERATING ENGINEERS"						
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2014	\$20.92	\$10.00	\$14.18	\$0.00	\$45.10
For apprentice rates see "Apprentice - OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53
For apprentice rates see "Apprentice - ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE <i>LOCAL 103</i> / COMMISSIONING <i>ELECTRICIANS</i>	03/01/2014	\$33.44	\$13.00	\$13.03	\$0.00	\$59.47
	09/01/2014	\$33.84	\$13.00	\$13.05	\$0.00	\$59.89
	03/01/2015	\$34.38	\$13.00	\$13.06	\$0.00	\$60.44
	09/01/2015	\$35.10	\$13.00	\$13.08	\$0.00	\$61.18
	03/01/2016	\$35.81	\$13.00	\$13.10	\$0.00	\$61.91
For apprentice rates see "Apprentice - TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$33.76	\$10.00	\$14.18	\$0.00	\$57.94
For apprentice rates see "Apprentice - OPERATING ENGINEERS"						

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FLAGGER & SIGNALER LABORERS - ZONE 1	06/01/2014	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2014	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	06/01/2015	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2015	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	06/01/2016	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
	12/01/2016	\$20.50	\$7.30	\$12.70	\$0.00	\$40.50
For apprentice rates see "Apprentice- LABORER"						
FLOORCOVERER FLOORCOVERERS LOCAL 2168 ZONE 1	03/01/2014	\$39.87	\$9.80	\$16.96	\$0.00	\$66.63

Apprentice - FLOORCOVERER - Local 2168 Zone 1

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.94	\$9.80	\$1.79	\$0.00	\$31.53
2	55	\$21.93	\$9.80	\$1.79	\$0.00	\$33.52
3	60	\$23.92	\$9.80	\$11.59	\$0.00	\$45.31
4	65	\$25.92	\$9.80	\$11.59	\$0.00	\$47.31
5	70	\$27.91	\$9.80	\$13.38	\$0.00	\$51.09
6	75	\$29.90	\$9.80	\$13.38	\$0.00	\$53.08
7	80	\$31.90	\$9.80	\$15.17	\$0.00	\$56.87
8	85	\$33.89	\$9.80	\$15.17	\$0.00	\$58.86

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GENERATOR/LIGHTING PLANT/HEATERS OPERATING ENGINEERS LOCAL 4	12/01/2013	\$28.11	\$10.00	\$14.18	\$0.00	\$52.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) GLAZIERS LOCAL 35 (ZONE 2)	01/01/2014	\$35.41	\$7.85	\$16.10	\$0.00	\$59.36
	07/01/2014	\$36.26	\$7.85	\$16.10	\$0.00	\$60.21
	01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
	07/01/2015	\$38.06	\$7.85	\$16.10	\$0.00	\$62.01
	01/01/2016	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
	07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
	01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.71	\$7.85	\$0.00	\$0.00	\$25.56
2	55	\$19.48	\$7.85	\$3.66	\$0.00	\$30.99
3	60	\$21.25	\$7.85	\$3.99	\$0.00	\$33.09
4	65	\$23.02	\$7.85	\$4.32	\$0.00	\$35.19
5	70	\$24.79	\$7.85	\$14.11	\$0.00	\$46.75
6	75	\$26.56	\$7.85	\$14.44	\$0.00	\$48.85
7	80	\$28.33	\$7.85	\$14.77	\$0.00	\$50.95
8	90	\$31.87	\$7.85	\$15.44	\$0.00	\$55.16

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.13	\$7.85	\$0.00	\$0.00	\$25.98
2	55	\$19.94	\$7.85	\$3.66	\$0.00	\$31.45
3	60	\$21.76	\$7.85	\$3.99	\$0.00	\$33.60
4	65	\$23.57	\$7.85	\$4.32	\$0.00	\$35.74
5	70	\$25.38	\$7.85	\$14.11	\$0.00	\$47.34
6	75	\$27.20	\$7.85	\$14.44	\$0.00	\$49.49
7	80	\$29.01	\$7.85	\$14.77	\$0.00	\$51.63
8	90	\$32.63	\$7.85	\$15.44	\$0.00	\$55.92

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS
OPERATING ENGINEERS LOCAL 4

12/01/2013 \$40.49 \$10.00 \$14.18 \$0.00 \$64.67

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$22.27	\$10.00	\$0.00	\$0.00	\$32.27
2	60	\$24.29	\$10.00	\$14.18	\$0.00	\$48.47
3	65	\$26.32	\$10.00	\$14.18	\$0.00	\$50.50
4	70	\$28.34	\$10.00	\$14.18	\$0.00	\$52.52
5	75	\$30.37	\$10.00	\$14.18	\$0.00	\$54.55
6	80	\$32.39	\$10.00	\$14.18	\$0.00	\$56.57
7	85	\$34.42	\$10.00	\$14.18	\$0.00	\$58.60
8	90	\$36.44	\$10.00	\$14.18	\$0.00	\$60.62

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK)	02/01/2014	\$42.76	\$9.82	\$19.74	\$2.17	\$74.49
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2014	\$43.61	\$9.82	\$19.74	\$2.17	\$75.34
	02/01/2015	\$44.51	\$9.82	\$19.74	\$2.17	\$76.24
	08/01/2015	\$45.51	\$9.82	\$19.74	\$2.17	\$77.24
	02/01/2016	\$46.51	\$9.82	\$19.74	\$2.17	\$78.24
	08/01/2016	\$47.66	\$9.82	\$19.74	\$2.17	\$79.39
	02/01/2017	\$48.76	\$9.82	\$19.74	\$2.17	\$80.49
	08/01/2017	\$49.86	\$9.82	\$19.74	\$2.17	\$81.59
	02/01/2018	\$51.01	\$9.82	\$19.74	\$2.17	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS)	03/01/2014	\$44.45	\$13.00	\$14.68	\$0.00	\$72.13
ELECTRICIANS LOCAL 103	09/01/2014	\$45.12	\$13.00	\$14.70	\$0.00	\$72.82
	03/01/2015	\$45.84	\$13.00	\$14.72	\$0.00	\$73.56
	09/01/2015	\$46.80	\$13.00	\$14.75	\$0.00	\$74.55
	03/01/2016	\$47.75	\$13.00	\$14.78	\$0.00	\$75.53

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR)	02/01/2014	\$42.76	\$9.82	\$19.74	\$2.17	\$74.49
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2014	\$43.61	\$9.82	\$19.74	\$2.17	\$75.34
	02/01/2015	\$44.51	\$9.82	\$19.74	\$2.17	\$76.24
	08/01/2015	\$45.51	\$9.82	\$19.74	\$2.17	\$77.24
	02/01/2016	\$46.51	\$9.82	\$19.74	\$2.17	\$78.24
	08/01/2016	\$47.66	\$9.82	\$19.74	\$2.17	\$79.39
	02/01/2017	\$48.76	\$9.82	\$19.74	\$2.17	\$80.49
	08/01/2017	\$49.86	\$9.82	\$19.74	\$2.17	\$81.59
	02/01/2018	\$51.01	\$9.82	\$19.74	\$2.17	\$82.74

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING - WATER)	03/01/2013	\$49.34	\$8.75	\$14.39	\$0.00	\$72.48
PIPEFITTERS LOCAL 537						

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC MECHANIC PIPEFITTERS LOCAL 537	03/01/2013	\$49.34	\$8.75	\$14.39	\$0.00	\$72.48
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS LABORERS - ZONE I	06/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	12/01/2014	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	06/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	12/01/2015	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	06/01/2016	\$37.85	\$7.30	\$12.70	\$0.00	\$57.85
	12/01/2016	\$38.85	\$7.30	\$12.70	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	09/01/2013	\$42.11	\$10.95	\$12.10	\$0.00	\$65.16
	09/01/2014	\$44.11	\$10.95	\$12.10	\$0.00	\$67.16

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston

Effective Date - 09/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$21.06	\$10.95	\$9.00	\$0.00	\$41.01
2	60	\$25.27	\$10.95	\$9.62	\$0.00	\$45.84
3	70	\$29.48	\$10.95	\$10.24	\$0.00	\$50.67
4	80	\$33.69	\$10.95	\$10.86	\$0.00	\$55.50

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.06	\$10.95	\$9.00	\$0.00	\$42.01
2	60	\$26.47	\$10.95	\$9.62	\$0.00	\$47.04
3	70	\$30.88	\$10.95	\$10.24	\$0.00	\$52.07
4	80	\$35.29	\$10.95	\$10.86	\$0.00	\$57.10

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER IRONWORKERS LOCAL 7 (BOSTON AREA)	03/16/2014	\$41.19	\$7.70	\$19.25	\$0.00	\$68.14
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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - IRONWORKER - Local 7 Boston

Effective Date - 03/16/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$24.71	\$7.70	\$19.25	\$0.00	\$51.66
2	70	\$28.83	\$7.70	\$19.25	\$0.00	\$55.78
3	75	\$30.89	\$7.70	\$19.25	\$0.00	\$57.84
4	80	\$32.95	\$7.70	\$19.25	\$0.00	\$59.90
5	85	\$35.01	\$7.70	\$19.25	\$0.00	\$61.96
6	90	\$37.07	\$7.70	\$19.25	\$0.00	\$64.02

Notes:

** Structural 1:6; Ornamental 1:4

Apprentice to Journeyworker Ratio:**

JACKHAMMER & PAVING BREAKER OPERATOR	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

LABORER	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - LABORER - Zone 1

Effective Date - 06/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.46	\$7.30	\$12.70	\$0.00	\$40.46
2	70	\$23.87	\$7.30	\$12.70	\$0.00	\$43.87
3	80	\$27.28	\$7.30	\$12.70	\$0.00	\$47.28
4	90	\$30.69	\$7.30	\$12.70	\$0.00	\$50.69

Effective Date - 12/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$20.91	\$7.30	\$12.70	\$0.00	\$40.91
2	70	\$24.40	\$7.30	\$12.70	\$0.00	\$44.40
3	80	\$27.88	\$7.30	\$12.70	\$0.00	\$47.88
4	90	\$31.37	\$7.30	\$12.70	\$0.00	\$51.37

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10

For apprentice rates see "Apprentice- LABORER"

LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER	06/01/2014	\$34.25	\$7.30	\$12.70	\$0.00	\$54.25
LABORERS - ZONE 1	12/01/2014	\$35.00	\$7.30	\$12.70	\$0.00	\$55.00
	06/01/2015	\$35.75	\$7.30	\$12.70	\$0.00	\$55.75
	12/01/2015	\$36.50	\$7.30	\$12.70	\$0.00	\$56.50

For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
LABORERS - ZONE 1	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

Issue Date: 06/12/2014

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
This classification applies to all tree work associated with the removal of standing trees, and trimming and removal of branches and limbs when the work is not done for a utility company for the purpose of operation, maintenance or repair of utility company equipment. For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2014	\$36.66	\$10.18	\$16.83	\$0.00	\$63.67
	08/01/2014	\$37.37	\$10.18	\$16.90	\$0.00	\$64.45
	02/01/2015	\$37.82	\$10.18	\$16.90	\$0.00	\$64.90
	08/01/2015	\$38.53	\$10.18	\$16.97	\$0.00	\$65.68
	02/01/2016	\$38.98	\$10.18	\$16.97	\$0.00	\$66.13
	08/01/2016	\$39.68	\$10.18	\$17.05	\$0.00	\$66.91
	02/01/2017	\$40.14	\$10.18	\$17.05	\$0.00	\$67.37

Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.33	\$10.18	\$16.83	\$0.00	\$45.34
2	60	\$22.00	\$10.18	\$16.83	\$0.00	\$49.01
3	70	\$25.66	\$10.18	\$16.83	\$0.00	\$52.67
4	80	\$29.33	\$10.18	\$16.83	\$0.00	\$56.34
5	90	\$32.99	\$10.18	\$16.83	\$0.00	\$60.00

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.69	\$10.18	\$16.90	\$0.00	\$45.77
2	60	\$22.42	\$10.18	\$16.90	\$0.00	\$49.50
3	70	\$26.16	\$10.18	\$16.90	\$0.00	\$53.24
4	80	\$29.90	\$10.18	\$16.90	\$0.00	\$56.98
5	90	\$33.63	\$10.18	\$16.90	\$0.00	\$60.71

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH
BRICKLAYERS LOCAL 3 - MARBLE & TILE

02/01/2014	\$48.10	\$10.18	\$18.15	\$0.00	\$76.43
08/01/2014	\$49.00	\$10.18	\$18.22	\$0.00	\$77.40
02/01/2015	\$49.56	\$10.18	\$18.22	\$0.00	\$77.96
08/01/2015	\$50.46	\$10.18	\$18.29	\$0.00	\$78.93
02/01/2016	\$51.03	\$10.18	\$18.29	\$0.00	\$79.50
08/01/2016	\$51.93	\$10.18	\$18.37	\$0.00	\$80.48
02/01/2017	\$52.50	\$10.18	\$18.37	\$0.00	\$81.05

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.05	\$10.18	\$18.15	\$0.00	\$52.38
2	60	\$28.86	\$10.18	\$18.15	\$0.00	\$57.19
3	70	\$33.67	\$10.18	\$18.15	\$0.00	\$62.00
4	80	\$38.48	\$10.18	\$18.15	\$0.00	\$66.81
5	90	\$43.29	\$10.18	\$18.15	\$0.00	\$71.62

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.50	\$10.18	\$18.22	\$0.00	\$52.90
2	60	\$29.40	\$10.18	\$18.22	\$0.00	\$57.80
3	70	\$34.30	\$10.18	\$18.22	\$0.00	\$62.70
4	80	\$39.20	\$10.18	\$18.22	\$0.00	\$67.60
5	90	\$44.10	\$10.18	\$18.22	\$0.00	\$72.50

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 - Zone 1	04/01/2014	\$35.73	\$9.80	\$16.21	\$0.00	\$61.74
	10/01/2014	\$36.68	\$9.80	\$16.21	\$0.00	\$62.69
	04/01/2015	\$37.64	\$9.80	\$16.21	\$0.00	\$63.65

Issue Date: 06/12/2014

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - MILLWRIGHT - Local 1121 Zone 1

Effective Date - 04/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$19.65	\$9.80	\$4.48	\$0.00	\$33.93
2	65	\$23.22	\$9.80	\$13.36	\$0.00	\$46.38
3	75	\$26.80	\$9.80	\$14.18	\$0.00	\$50.78
4	85	\$30.37	\$9.80	\$14.99	\$0.00	\$55.16

Effective Date - 10/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$20.17	\$9.80	\$4.48	\$0.00	\$34.45
2	65	\$23.84	\$9.80	\$13.36	\$0.00	\$47.00
3	75	\$27.51	\$9.80	\$14.18	\$0.00	\$51.49
4	85	\$31.18	\$9.80	\$14.99	\$0.00	\$55.97

Notes:

Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:5

MORTAR MIXER
LABORERS - ZONE 1

06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES, GRADALLS)
OPERATING ENGINEERS LOCAL 4

12/01/2013	\$20.96	\$10.00	\$14.18	\$0.00	\$45.14
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS)
OPERATING ENGINEERS LOCAL 4

12/01/2013	\$24.43	\$10.00	\$14.18	\$0.00	\$48.61
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS II
OPERATING ENGINEERS LOCAL 4

12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS)
PAINTERS LOCAL 35 - ZONE 2

01/01/2014	\$45.91	\$7.85	\$16.10	\$0.00	\$69.86
07/01/2014	\$46.76	\$7.85	\$16.10	\$0.00	\$70.71
01/01/2015	\$47.66	\$7.85	\$16.10	\$0.00	\$71.61
07/01/2015	\$48.56	\$7.85	\$16.10	\$0.00	\$72.51
01/01/2016	\$49.51	\$7.85	\$16.10	\$0.00	\$73.46
07/01/2016	\$50.46	\$7.85	\$16.10	\$0.00	\$74.41
01/01/2017	\$51.41	\$7.85	\$16.10	\$0.00	\$75.36

Issue Date: 06/12/2014

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.96	\$7.85	\$0.00	\$0.00	\$30.81
2	55	\$25.25	\$7.85	\$3.66	\$0.00	\$36.76
3	60	\$27.55	\$7.85	\$3.99	\$0.00	\$39.39
4	65	\$29.84	\$7.85	\$4.32	\$0.00	\$42.01
5	70	\$32.14	\$7.85	\$14.11	\$0.00	\$54.10
6	75	\$34.43	\$7.85	\$14.44	\$0.00	\$56.72
7	80	\$36.73	\$7.85	\$14.77	\$0.00	\$59.35
8	90	\$41.32	\$7.85	\$15.44	\$0.00	\$64.61

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$7.85	\$0.00	\$0.00	\$31.23
2	55	\$25.72	\$7.85	\$3.66	\$0.00	\$37.23
3	60	\$28.06	\$7.85	\$3.99	\$0.00	\$39.90
4	65	\$30.39	\$7.85	\$4.32	\$0.00	\$42.56
5	70	\$32.73	\$7.85	\$14.11	\$0.00	\$54.69
6	75	\$35.07	\$7.85	\$14.44	\$0.00	\$57.36
7	80	\$37.41	\$7.85	\$14.77	\$0.00	\$60.03
8	90	\$42.08	\$7.85	\$15.44	\$0.00	\$65.37

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	01/01/2014	\$36.81	\$7.85	\$16.10	\$0.00	\$60.76
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	07/01/2014	\$37.66	\$7.85	\$16.10	\$0.00	\$61.61
	01/01/2015	\$38.56	\$7.85	\$16.10	\$0.00	\$62.51
	07/01/2015	\$39.46	\$7.85	\$16.10	\$0.00	\$63.41
	01/01/2016	\$40.41	\$7.85	\$16.10	\$0.00	\$64.36
	07/01/2016	\$41.36	\$7.85	\$16.10	\$0.00	\$65.31
	01/01/2017	\$42.31	\$7.85	\$16.10	\$0.00	\$66.26

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - . PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.41	\$7.85	\$0.00	\$0.00	\$26.26
2	55	\$20.25	\$7.85	\$3.66	\$0.00	\$31.76
3	60	\$22.09	\$7.85	\$3.99	\$0.00	\$33.93
4	65	\$23.93	\$7.85	\$4.32	\$0.00	\$36.10
5	70	\$25.77	\$7.85	\$14.11	\$0.00	\$47.73
6	75	\$27.61	\$7.85	\$14.44	\$0.00	\$49.90
7	80	\$29.45	\$7.85	\$14.77	\$0.00	\$52.07
8	90	\$33.13	\$7.85	\$15.44	\$0.00	\$56.42

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.83	\$7.85	\$0.00	\$0.00	\$26.68
2	55	\$20.71	\$7.85	\$3.66	\$0.00	\$32.22
3	60	\$22.60	\$7.85	\$3.99	\$0.00	\$34.44
4	65	\$24.48	\$7.85	\$4.32	\$0.00	\$36.65
5	70	\$26.36	\$7.85	\$14.11	\$0.00	\$48.32
6	75	\$28.25	\$7.85	\$14.44	\$0.00	\$50.54
7	80	\$30.13	\$7.85	\$14.77	\$0.00	\$52.75
8	90	\$33.89	\$7.85	\$15.44	\$0.00	\$57.18

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)
PAINTERS LOCAL 35 - ZONE 2

01/01/2014	\$34.87	\$7.85	\$16.10	\$0.00	\$58.82
07/01/2014	\$35.72	\$7.85	\$16.10	\$0.00	\$59.67
01/01/2015	\$36.62	\$7.85	\$16.10	\$0.00	\$60.57
07/01/2015	\$37.52	\$7.85	\$16.10	\$0.00	\$61.47
01/01/2016	\$38.47	\$7.85	\$16.10	\$0.00	\$62.42
07/01/2016	\$39.42	\$7.85	\$16.10	\$0.00	\$63.37
01/01/2017	\$40.37	\$7.85	\$16.10	\$0.00	\$64.32

Issue Date: 06/12/2014

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.44	\$7.85	\$0.00	\$0.00	\$25.29
2	55	\$19.18	\$7.85	\$3.66	\$0.00	\$30.69
3	60	\$20.92	\$7.85	\$3.99	\$0.00	\$32.76
4	65	\$22.67	\$7.85	\$4.32	\$0.00	\$34.84
5	70	\$24.41	\$7.85	\$14.11	\$0.00	\$46.37
6	75	\$26.15	\$7.85	\$14.44	\$0.00	\$48.44
7	80	\$27.90	\$7.85	\$14.77	\$0.00	\$50.52
8	90	\$31.38	\$7.85	\$15.44	\$0.00	\$54.67

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.86	\$7.85	\$0.00	\$0.00	\$25.71
2	55	\$19.65	\$7.85	\$3.66	\$0.00	\$31.16
3	60	\$21.43	\$7.85	\$3.99	\$0.00	\$33.27
4	65	\$23.22	\$7.85	\$4.32	\$0.00	\$35.39
5	70	\$25.00	\$7.85	\$14.11	\$0.00	\$46.96
6	75	\$26.79	\$7.85	\$14.44	\$0.00	\$49.08
7	80	\$28.58	\$7.85	\$14.77	\$0.00	\$51.20
8	90	\$32.15	\$7.85	\$15.44	\$0.00	\$55.44

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (TRAFFIC MARKINGS)	06/01/2014	\$34.10	\$7.30	\$12.70	\$0.00	\$54.10
LABORERS - ZONE 1	12/01/2014	\$34.85	\$7.30	\$12.70	\$0.00	\$54.85
	06/01/2015	\$35.60	\$7.30	\$12.70	\$0.00	\$55.60
	12/01/2015	\$36.35	\$7.30	\$12.70	\$0.00	\$56.35
	06/01/2016	\$37.10	\$7.30	\$12.70	\$0.00	\$57.10
	12/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
For Apprentice rates see "Apprentice- LABORER"						
PAINTER / TAPER (BRUSH, NEW) *	01/01/2014	\$35.41	\$7.85	\$16.10	\$0.00	\$59.36
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	07/01/2014	\$36.26	\$7.85	\$16.10	\$0.00	\$60.21
	01/01/2015	\$37.16	\$7.85	\$16.10	\$0.00	\$61.11
	07/01/2015	\$38.06	\$7.85	\$16.10	\$0.00	\$62.01
	01/01/2016	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
	07/01/2016	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
	01/01/2017	\$40.91	\$7.85	\$16.10	\$0.00	\$64.86

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Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.71	\$7.85	\$0.00	\$0.00	\$25.56
2	55	\$19.48	\$7.85	\$3.66	\$0.00	\$30.99
3	60	\$21.25	\$7.85	\$3.99	\$0.00	\$33.09
4	65	\$23.02	\$7.85	\$4.32	\$0.00	\$35.19
5	70	\$24.79	\$7.85	\$14.11	\$0.00	\$46.75
6	75	\$26.56	\$7.85	\$14.44	\$0.00	\$48.85
7	80	\$28.33	\$7.85	\$14.77	\$0.00	\$50.95
8	90	\$31.87	\$7.85	\$15.44	\$0.00	\$55.16

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$18.13	\$7.85	\$0.00	\$0.00	\$25.98
2	55	\$19.94	\$7.85	\$3.66	\$0.00	\$31.45
3	60	\$21.76	\$7.85	\$3.99	\$0.00	\$33.60
4	65	\$23.57	\$7.85	\$4.32	\$0.00	\$35.74
5	70	\$25.38	\$7.85	\$14.11	\$0.00	\$47.34
6	75	\$27.20	\$7.85	\$14.44	\$0.00	\$49.49
7	80	\$29.01	\$7.85	\$14.77	\$0.00	\$51.63
8	90	\$32.63	\$7.85	\$15.44	\$0.00	\$55.92

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)
PAINTERS LOCAL 35 - ZONE 2

01/01/2014	\$33.47	\$7.85	\$16.10	\$0.00	\$57.42
07/01/2014	\$34.32	\$7.85	\$16.10	\$0.00	\$58.27
01/01/2015	\$35.22	\$7.85	\$16.10	\$0.00	\$59.17
07/01/2015	\$36.12	\$7.85	\$16.10	\$0.00	\$60.07
01/01/2016	\$37.07	\$7.85	\$16.10	\$0.00	\$61.02
07/01/2016	\$38.02	\$7.85	\$16.10	\$0.00	\$61.97
01/01/2017	\$38.97	\$7.85	\$16.10	\$0.00	\$62.92

Issue Date: 06/12/2014

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 01/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$16.74	\$7.85	\$0.00	\$0.00	\$24.59
2	55	\$18.41	\$7.85	\$3.66	\$0.00	\$29.92
3	60	\$20.08	\$7.85	\$3.99	\$0.00	\$31.92
4	65	\$21.76	\$7.85	\$4.32	\$0.00	\$33.93
5	70	\$23.43	\$7.85	\$14.11	\$0.00	\$45.39
6	75	\$25.10	\$7.85	\$14.44	\$0.00	\$47.39
7	80	\$26.78	\$7.85	\$14.77	\$0.00	\$49.40
8	90	\$30.12	\$7.85	\$15.44	\$0.00	\$53.41

Effective Date - 07/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$17.16	\$7.85	\$0.00	\$0.00	\$25.01
2	55	\$18.88	\$7.85	\$3.66	\$0.00	\$30.39
3	60	\$20.59	\$7.85	\$3.99	\$0.00	\$32.43
4	65	\$22.31	\$7.85	\$4.32	\$0.00	\$34.48
5	70	\$24.02	\$7.85	\$14.11	\$0.00	\$45.98
6	75	\$25.74	\$7.85	\$14.44	\$0.00	\$48.03
7	80	\$27.46	\$7.85	\$14.77	\$0.00	\$50.08
8	90	\$30.89	\$7.85	\$15.44	\$0.00	\$54.18

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PANEL & PICKUP TRUCKS DRIVER	06/01/2014	\$32.23	\$9.41	\$8.80	\$0.00	\$50.44
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2014	\$32.23	\$9.91	\$8.80	\$0.00	\$50.94
	12/01/2014	\$32.23	\$9.91	\$9.33	\$0.00	\$51.47
	06/01/2015	\$32.58	\$9.91	\$9.33	\$0.00	\$51.82
	08/01/2015	\$32.58	\$10.41	\$9.33	\$0.00	\$52.32
	12/01/2015	\$32.58	\$10.41	\$10.08	\$0.00	\$53.07
	06/01/2016	\$33.08	\$10.41	\$10.08	\$0.00	\$53.57
	08/01/2016	\$33.08	\$10.91	\$10.08	\$0.00	\$54.07
	12/01/2016	\$33.08	\$10.91	\$10.89	\$0.00	\$54.88
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	08/01/2013	\$40.10	\$9.80	\$18.17	\$0.00	\$68.07
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
PILE DRIVER	08/01/2013	\$40.10	\$9.80	\$18.17	\$0.00	\$68.07
PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2014	\$41.60	\$9.80	\$18.17	\$0.00	\$69.57
	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - PILE DRIVER - Local 56 Zone 1

Effective Date - 08/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.05	\$9.80	\$18.17	\$0.00	\$48.02
2	60	\$24.06	\$9.80	\$18.17	\$0.00	\$52.03
3	70	\$28.07	\$9.80	\$18.17	\$0.00	\$56.04
4	75	\$30.08	\$9.80	\$18.17	\$0.00	\$58.05
5	80	\$32.08	\$9.80	\$18.17	\$0.00	\$60.05
6	80	\$32.08	\$9.80	\$18.17	\$0.00	\$60.05
7	90	\$36.09	\$9.80	\$18.17	\$0.00	\$64.06
8	90	\$36.09	\$9.80	\$18.17	\$0.00	\$64.06

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.80	\$9.80	\$18.17	\$0.00	\$48.77
2	60	\$24.96	\$9.80	\$18.17	\$0.00	\$52.93
3	70	\$29.12	\$9.80	\$18.17	\$0.00	\$57.09
4	75	\$31.20	\$9.80	\$18.17	\$0.00	\$59.17
5	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
6	80	\$33.28	\$9.80	\$18.17	\$0.00	\$61.25
7	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41
8	90	\$37.44	\$9.80	\$18.17	\$0.00	\$65.41

Notes:

Apprentice to Journeyworker Ratio:1:3

PIPEFITTER & STEAMFITTER
PIPEFITTERS LOCAL 537

03/01/2013 \$49.34 \$8.75 \$14.39 \$0.00 \$72.48

Apprentice - PIPEFITTER - Local 537

Effective Date - 03/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.74	\$8.75	\$6.50	\$0.00	\$34.99
2	45	\$22.20	\$8.75	\$14.39	\$0.00	\$45.34
3	60	\$29.60	\$8.75	\$14.39	\$0.00	\$52.74
4	70	\$34.54	\$8.75	\$14.39	\$0.00	\$57.68
5	80	\$39.47	\$8.75	\$14.39	\$0.00	\$62.61

Notes:

** 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.

Refrig/AC Mechanic **1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

Apprentice to Journeyworker Ratio:**

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIPELAYER LABORERS - ZONE 1	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12	03/01/2014	\$49.41	\$9.82	\$14.29	\$0.00	\$73.52
	09/01/2014	\$50.41	\$9.82	\$14.29	\$0.00	\$74.52
	03/01/2015	\$51.41	\$9.82	\$14.29	\$0.00	\$75.52
	09/01/2015	\$52.41	\$9.82	\$14.29	\$0.00	\$76.52
	03/01/2016	\$53.56	\$9.82	\$14.29	\$0.00	\$77.67
	09/01/2016	\$54.61	\$9.82	\$14.29	\$0.00	\$78.72
	03/01/2017	\$55.61	\$9.82	\$14.29	\$0.00	\$79.72

Apprentice - PLUMBER/GASFITTER - Local 12

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.29	\$9.82	\$5.33	\$0.00	\$32.44
2	40	\$19.76	\$9.82	\$6.02	\$0.00	\$35.60
3	55	\$27.18	\$9.82	\$8.08	\$0.00	\$45.08
4	65	\$32.12	\$9.82	\$9.47	\$0.00	\$51.41
5	75	\$37.06	\$9.82	\$10.85	\$0.00	\$57.73

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$17.64	\$9.82	\$5.33	\$0.00	\$32.79
2	40	\$20.16	\$9.82	\$6.02	\$0.00	\$36.00
3	55	\$27.73	\$9.82	\$8.08	\$0.00	\$45.63
4	65	\$32.77	\$9.82	\$9.47	\$0.00	\$52.06
5	75	\$37.81	\$9.82	\$10.85	\$0.00	\$58.48

Notes:

** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
Step4 with lic\$54.58 Step5 with lic\$60.90

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537	03/01/2013	\$49.34	\$8.75	\$14.39	\$0.00	\$72.48
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For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR LABORERS - ZONE 1	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

Issue Date: 06/12/2014

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER <i>LABORERS - ZONE 1</i>	06/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	12/01/2014	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	06/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	12/01/2015	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	06/01/2016	\$38.10	\$7.30	\$12.70	\$0.00	\$58.10
	12/01/2016	\$39.10	\$7.30	\$12.70	\$0.00	\$59.10
For apprentice rates see "Apprentice- LABORER"						
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$28.11	\$10.00	\$14.18	\$0.00	\$52.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY MIX CONCRETE DRIVERS after 4/30/10 <i>(Drivers Hired After 4/30/2010) TEAMSTERS LOCAL 25b</i>	05/01/2014	\$27.73	\$7.48	\$8.65	\$0.00	\$43.86
	07/01/2014	\$27.73	\$7.73	\$8.65	\$0.00	\$44.11
	05/01/2015	\$27.88	\$7.73	\$8.92	\$0.00	\$44.53
	07/01/2015	\$27.88	\$7.98	\$8.92	\$0.00	\$44.78
	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
READY-MIX CONCRETE DRIVER <i>TEAMSTERS LOCAL 25b</i>	05/01/2014	\$29.03	\$7.48	\$8.65	\$0.00	\$45.16
	07/01/2014	\$29.03	\$7.73	\$8.65	\$0.00	\$45.41
	05/01/2015	\$29.18	\$7.73	\$8.92	\$0.00	\$45.83
	07/01/2015	\$29.18	\$7.98	\$8.92	\$0.00	\$46.08
	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) <i>CARPENTERS -ZONE 2 (Residential Wood)</i>	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies only to the construction of new, wood frame residences that do not exceed four stories including the basement. <i>CARPENTERS -ZONE 2 (Residential Wood)</i> As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - CARPENTER (Residential Wood Frame) - Zone 2

Effective Date - 05/01/2011

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20.88
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$27.11
3	65	\$15.76	\$6.34	\$6.23	\$0.00	\$28.33
4	70	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54
5	75	\$18.18	\$6.34	\$6.23	\$0.00	\$30.75
6	80	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96
7	85	\$20.60	\$6.34	\$6.23	\$0.00	\$33.17
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39

Notes:

Apprentice to Journeyworker Ratio:1:5

RIDE-ON MOTORIZED BUGGY OPERATOR
LABORERS - ZONE 1

06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

ROLLER/SPREADER/MULCHING MACHINE
OPERATING ENGINEERS LOCAL 4

12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc. Roofer Waterproofing & Roofer Dampproofg)
ROOFERS LOCAL 33

02/01/2014	\$39.21	\$10.50	\$10.70	\$0.00	\$60.41
08/01/2014	\$40.11	\$10.50	\$10.70	\$0.00	\$61.31
02/01/2015	\$41.01	\$10.50	\$10.70	\$0.00	\$62.21
08/01/2015	\$41.91	\$10.50	\$10.70	\$0.00	\$63.11
02/01/2016	\$42.81	\$10.50	\$10.70	\$0.00	\$64.01

Issue Date: 06/12/2014

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$19.61	\$10.50	\$3.38	\$0.00	\$33.49
2	60	\$23.53	\$10.50	\$10.70	\$0.00	\$44.73
3	65	\$25.49	\$10.50	\$10.70	\$0.00	\$46.69
4	75	\$29.41	\$10.50	\$10.70	\$0.00	\$50.61
5	85	\$33.33	\$10.50	\$10.70	\$0.00	\$54.53

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$20.06	\$10.50	\$3.38	\$0.00	\$33.94
2	60	\$24.07	\$10.50	\$10.70	\$0.00	\$45.27
3	65	\$26.07	\$10.50	\$10.70	\$0.00	\$47.27
4	75	\$30.08	\$10.50	\$10.70	\$0.00	\$51.28
5	85	\$34.09	\$10.50	\$10.70	\$0.00	\$55.29

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE
ROOFERS LOCAL 33

02/01/2014	\$39.46	\$10.50	\$10.70	\$0.00	\$60.66
08/01/2014	\$40.36	\$10.50	\$10.70	\$0.00	\$61.56
02/01/2015	\$41.26	\$10.50	\$10.70	\$0.00	\$62.46
08/01/2015	\$42.16	\$10.50	\$10.70	\$0.00	\$63.36
02/01/2016	\$43.06	\$10.50	\$10.70	\$0.00	\$64.26

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER
SHEETMETAL WORKERS LOCAL 17 - A

02/01/2014	\$42.76	\$9.82	\$19.74	\$2.17	\$74.49
08/01/2014	\$43.61	\$9.82	\$19.74	\$2.17	\$75.34
02/01/2015	\$44.51	\$9.82	\$19.74	\$2.17	\$76.24
08/01/2015	\$45.51	\$9.82	\$19.74	\$2.17	\$77.24
02/01/2016	\$46.51	\$9.82	\$19.74	\$2.17	\$78.24
08/01/2016	\$47.66	\$9.82	\$19.74	\$2.17	\$79.39
02/01/2017	\$48.76	\$9.82	\$19.74	\$2.17	\$80.49
08/01/2017	\$49.86	\$9.82	\$19.74	\$2.17	\$81.59
02/01/2018	\$51.01	\$9.82	\$19.74	\$2.17	\$82.74

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - SHEET METAL WORKER - Local 17-A

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.10	\$9.82	\$4.28	\$0.00	\$31.20
2	40	\$17.10	\$9.82	\$4.28	\$0.00	\$31.20
3	45	\$19.24	\$9.82	\$8.70	\$1.13	\$38.89
4	45	\$19.24	\$9.82	\$8.70	\$1.13	\$38.89
5	50	\$21.38	\$9.82	\$9.49	\$1.22	\$41.91
6	50	\$21.38	\$9.82	\$9.74	\$1.23	\$42.17
7	60	\$25.66	\$9.82	\$11.05	\$1.40	\$47.93
8	65	\$27.79	\$9.82	\$11.84	\$1.48	\$50.93
9	75	\$32.07	\$9.82	\$13.41	\$1.66	\$56.96
10	85	\$36.35	\$9.82	\$14.48	\$1.82	\$62.47

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.44	\$9.82	\$4.28	\$0.00	\$31.54
2	40	\$17.44	\$9.82	\$4.28	\$0.00	\$31.54
3	45	\$19.62	\$9.82	\$8.70	\$1.13	\$39.27
4	45	\$19.62	\$9.82	\$8.70	\$1.13	\$39.27
5	50	\$21.81	\$9.82	\$9.49	\$1.22	\$42.34
6	50	\$21.81	\$9.82	\$9.74	\$1.23	\$42.60
7	60	\$26.17	\$9.82	\$11.05	\$1.40	\$48.44
8	65	\$28.35	\$9.82	\$11.84	\$1.48	\$51.49
9	75	\$32.71	\$9.82	\$13.41	\$1.66	\$57.60
10	85	\$37.07	\$9.82	\$14.48	\$1.82	\$63.19

Notes:

Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SIGN ERECTOR
PAINTERS LOCAL 35 - ZONE 2

06/01/2013 \$25.81 \$7.07 \$7.05 \$0.00 \$39.93

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - SIGN ERECTOR - Local 35 Zone 2

Effective Date - 06/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.98
2	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72
3	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01
4	65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30
5	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19
6	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48
7	80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77
8	85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06
9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35

Notes:

Steps are 4 mos.

Apprentice to Journeyworker Ratio:1:1

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2014	\$32.69	\$9.41	\$8.80	\$0.00	\$50.90
	08/01/2014	\$32.69	\$9.91	\$8.80	\$0.00	\$51.40
	12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
	06/01/2014	\$32.98	\$9.41	\$8.80	\$0.00	\$51.19
	08/01/2014	\$32.98	\$9.91	\$8.80	\$0.00	\$51.69
	12/01/2014	\$32.98	\$9.91	\$9.33	\$0.00	\$52.22
	06/01/2015	\$33.33	\$9.91	\$9.33	\$0.00	\$52.57
	08/01/2015	\$33.33	\$10.41	\$9.33	\$0.00	\$53.07
	12/01/2015	\$33.33	\$10.41	\$10.08	\$0.00	\$53.82
	06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	08/01/2016	\$33.83	\$10.91	\$10.08	\$0.00	\$54.82
	12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63
	03/01/2014	\$53.58	\$8.42	\$13.60	\$0.00	\$75.60
	10/01/2014	\$54.73	\$8.42	\$13.60	\$0.00	\$76.75
	01/01/2015	\$54.73	\$8.42	\$13.75	\$0.00	\$76.90
	03/01/2015	\$55.73	\$8.42	\$13.75	\$0.00	\$77.90
	10/01/2015	\$56.88	\$8.42	\$13.75	\$0.00	\$79.05
	01/01/2016	\$56.88	\$8.67	\$13.90	\$0.00	\$79.45
	03/01/2016	\$57.88	\$8.67	\$13.90	\$0.00	\$80.45
	10/01/2016	\$59.03	\$8.67	\$13.90	\$0.00	\$81.60
	03/01/2017	\$60.03	\$8.67	\$13.90	\$0.00	\$82.60

Issue Date: 06/12/2014

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$18.75	\$8.42	\$8.25	\$0.00	\$35.42
2	40	\$21.43	\$8.42	\$8.25	\$0.00	\$38.10
3	45	\$24.11	\$8.42	\$8.25	\$0.00	\$40.78
4	50	\$26.79	\$8.42	\$8.25	\$0.00	\$43.46
5	55	\$29.47	\$8.42	\$8.25	\$0.00	\$46.14
6	60	\$32.15	\$8.42	\$8.25	\$0.00	\$48.82
7	65	\$34.83	\$8.42	\$8.25	\$0.00	\$51.50
8	70	\$37.51	\$8.42	\$8.25	\$0.00	\$54.18
9	75	\$40.19	\$8.42	\$8.25	\$0.00	\$56.86
10	80	\$42.86	\$8.42	\$8.25	\$0.00	\$59.53

Effective Date - 10/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$19.16	\$8.42	\$8.25	\$0.00	\$35.83
2	40	\$21.89	\$8.42	\$8.25	\$0.00	\$38.56
3	45	\$24.63	\$8.42	\$8.25	\$0.00	\$41.30
4	50	\$27.37	\$8.42	\$8.25	\$0.00	\$44.04
5	55	\$30.10	\$8.42	\$8.25	\$0.00	\$46.77
6	60	\$32.84	\$8.42	\$8.25	\$0.00	\$49.51
7	65	\$35.57	\$8.42	\$8.25	\$0.00	\$52.24
8	70	\$38.31	\$8.42	\$8.25	\$0.00	\$54.98
9	75	\$41.05	\$8.42	\$8.25	\$0.00	\$57.72
10	80	\$43.78	\$8.42	\$8.25	\$0.00	\$60.45

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

STEAM BOILER OPERATOR OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN OPERATING ENGINEERS LOCAL 4	12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN ELECTRICIANS LOCAL 103	03/01/2014	\$33.44	\$13.00	\$13.03	\$0.00	\$59.47
	09/01/2014	\$33.84	\$13.00	\$13.05	\$0.00	\$59.89
	03/01/2015	\$34.38	\$13.00	\$13.06	\$0.00	\$60.44
	09/01/2015	\$35.10	\$13.00	\$13.08	\$0.00	\$61.18
	03/01/2016	\$35.81	\$13.00	\$13.10	\$0.00	\$61.91

Issue Date: 06/12/2014

Wage Request Number: 20140612-039

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103

Effective Date - 03/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.38	\$13.00	\$0.40	\$0.00	\$26.78
2	40	\$13.38	\$13.00	\$0.40	\$0.00	\$26.78
3	45	\$15.05	\$13.00	\$10.29	\$0.00	\$38.34
4	45	\$15.05	\$13.00	\$10.29	\$0.00	\$38.34
5	50	\$16.72	\$13.00	\$10.54	\$0.00	\$40.26
6	55	\$18.39	\$13.00	\$10.79	\$0.00	\$42.18
7	60	\$20.06	\$13.00	\$11.04	\$0.00	\$44.10
8	65	\$21.74	\$13.00	\$11.29	\$0.00	\$46.03
9	70	\$23.41	\$13.00	\$11.54	\$0.00	\$47.95
10	75	\$25.08	\$13.00	\$11.79	\$0.00	\$49.87

Effective Date - 09/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$13.54	\$13.00	\$0.41	\$0.00	\$26.95
2	40	\$13.54	\$13.00	\$0.41	\$0.00	\$26.95
3	45	\$15.23	\$13.00	\$10.30	\$0.00	\$38.53
4	45	\$15.23	\$13.00	\$10.30	\$0.00	\$38.53
5	50	\$16.92	\$13.00	\$10.55	\$0.00	\$40.47
6	55	\$18.61	\$13.00	\$10.80	\$0.00	\$42.41
7	60	\$20.30	\$13.00	\$11.05	\$0.00	\$44.35
8	65	\$22.00	\$13.00	\$11.30	\$0.00	\$46.30
9	70	\$23.69	\$13.00	\$11.55	\$0.00	\$48.24
10	75	\$25.38	\$13.00	\$11.80	\$0.00	\$50.18

Notes:

Apprentice to Journeyworker Ratio:1:1

TERRAZZO FINISHERS
BRICKLAYERS LOCAL 3 - MARBLE & TILE

02/01/2014	\$47.00	\$10.18	\$18.15	\$0.00	\$75.33
08/01/2014	\$47.90	\$10.18	\$18.22	\$0.00	\$76.30
02/01/2015	\$48.46	\$10.18	\$18.22	\$0.00	\$76.86
08/01/2015	\$49.36	\$10.18	\$18.29	\$0.00	\$77.83
02/01/2016	\$49.93	\$10.18	\$18.29	\$0.00	\$78.40
08/01/2016	\$50.83	\$10.18	\$18.37	\$0.00	\$79.38
02/01/2017	\$51.40	\$10.18	\$18.37	\$0.00	\$79.95

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Classification

Effective Date Base Wage Health Pension Supplemental
Unemployment Total Rate

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.50	\$10.18	\$18.15	\$0.00	\$51.83
2	60	\$28.20	\$10.18	\$18.15	\$0.00	\$56.53
3	70	\$32.90	\$10.18	\$18.15	\$0.00	\$61.23
4	80	\$37.60	\$10.18	\$18.15	\$0.00	\$65.93
5	90	\$42.30	\$10.18	\$18.15	\$0.00	\$70.63

Effective Date - 08/01/2014

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$10.18	\$18.22	\$0.00	\$52.35
2	60	\$28.74	\$10.18	\$18.22	\$0.00	\$57.14
3	70	\$33.53	\$10.18	\$18.22	\$0.00	\$61.93
4	80	\$38.32	\$10.18	\$18.22	\$0.00	\$66.72
5	90	\$43.11	\$10.18	\$18.22	\$0.00	\$71.51

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER
LABORERS - FOUNDATION AND MARINE

06/01/2014	\$35.45	\$7.30	\$12.90	\$0.00	\$55.65
12/01/2014	\$36.20	\$7.30	\$12.90	\$0.00	\$56.40
06/01/2015	\$36.95	\$7.30	\$12.90	\$0.00	\$57.15
12/01/2015	\$37.70	\$7.30	\$12.90	\$0.00	\$57.90
06/01/2016	\$38.45	\$7.30	\$12.90	\$0.00	\$58.65
12/01/2016	\$39.45	\$7.30	\$12.90	\$0.00	\$59.65

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER
LABORERS - FOUNDATION AND MARINE

06/01/2014	\$34.17	\$7.30	\$12.90	\$0.00	\$54.37
12/01/2014	\$34.92	\$7.30	\$12.90	\$0.00	\$55.12
06/01/2015	\$35.67	\$7.30	\$12.90	\$0.00	\$55.87
12/01/2015	\$36.42	\$7.30	\$12.90	\$0.00	\$56.62
06/01/2016	\$37.17	\$7.30	\$12.90	\$0.00	\$57.37
12/01/2016	\$38.17	\$7.30	\$12.90	\$0.00	\$58.37

For apprentice rates see "Apprentice- LABORER"

TEST BORING LABORER
LABORERS - FOUNDATION AND MARINE

06/01/2014	\$34.05	\$7.30	\$12.90	\$0.00	\$54.25
12/01/2014	\$34.80	\$7.30	\$12.90	\$0.00	\$55.00
06/01/2015	\$35.55	\$7.30	\$12.90	\$0.00	\$55.75
12/01/2015	\$36.30	\$7.30	\$12.90	\$0.00	\$56.50
06/01/2016	\$37.05	\$7.30	\$12.90	\$0.00	\$57.25
12/01/2016	\$38.05	\$7.30	\$12.90	\$0.00	\$58.25

For apprentice rates see "Apprentice- LABORER"

TRACTORS/PORTABLE STEAM GENERATORS
OPERATING ENGINEERS LOCAL 4

12/01/2013	\$40.11	\$10.00	\$14.18	\$0.00	\$64.29
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For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	06/01/2014	\$33.27	\$9.41	\$8.80	\$0.00	\$51.48
	08/01/2014	\$33.27	\$9.91	\$8.80	\$0.00	\$51.98
	12/01/2014	\$33.27	\$9.91	\$9.33	\$0.00	\$52.51
	06/01/2015	\$33.62	\$9.91	\$9.33	\$0.00	\$52.86
	08/01/2015	\$33.62	\$10.41	\$9.33	\$0.00	\$53.36
	12/01/2015	\$33.62	\$10.41	\$10.08	\$0.00	\$54.11
	06/01/2016	\$34.12	\$10.41	\$10.08	\$0.00	\$54.61
	08/01/2016	\$34.12	\$10.91	\$10.08	\$0.00	\$55.11
	12/01/2016	\$34.12	\$10.91	\$10.89	\$0.00	\$55.92
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2014	\$46.33	\$7.30	\$13.30	\$0.00	\$66.93
	12/01/2014	\$47.08	\$7.30	\$13.30	\$0.00	\$67.68
	06/01/2015	\$47.83	\$7.30	\$13.30	\$0.00	\$68.43
	12/01/2015	\$48.58	\$7.30	\$13.30	\$0.00	\$69.18
	06/01/2016	\$49.33	\$7.30	\$13.30	\$0.00	\$69.93
	12/01/2016	\$50.33	\$7.30	\$13.30	\$0.00	\$70.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2014	\$48.33	\$7.30	\$13.30	\$0.00	\$68.93
	12/01/2014	\$49.08	\$7.30	\$13.30	\$0.00	\$69.68
	06/01/2015	\$49.83	\$7.30	\$13.30	\$0.00	\$70.43
	12/01/2015	\$50.58	\$7.30	\$13.30	\$0.00	\$71.18
	06/01/2016	\$51.33	\$7.30	\$13.30	\$0.00	\$71.93
	12/01/2016	\$52.33	\$7.30	\$13.30	\$0.00	\$72.93
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2014	\$38.40	\$7.30	\$13.30	\$0.00	\$59.00
	12/01/2014	\$39.15	\$7.30	\$13.30	\$0.00	\$59.75
	06/01/2015	\$39.90	\$7.30	\$13.30	\$0.00	\$60.50
	12/01/2015	\$40.65	\$7.30	\$13.30	\$0.00	\$61.25
	06/01/2016	\$41.40	\$7.30	\$13.30	\$0.00	\$62.00
	12/01/2016	\$42.40	\$7.30	\$13.30	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2014	\$40.40	\$7.30	\$13.30	\$0.00	\$61.00
	12/01/2014	\$41.15	\$7.30	\$13.30	\$0.00	\$61.75
	06/01/2015	\$41.90	\$7.30	\$13.30	\$0.00	\$62.50
	12/01/2015	\$42.65	\$7.30	\$13.30	\$0.00	\$63.25
	06/01/2016	\$43.40	\$7.30	\$13.30	\$0.00	\$64.00
	12/01/2016	\$44.40	\$7.30	\$13.30	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE A</i>	06/01/2014	\$32.69	\$9.41	\$8.80	\$0.00	\$50.90
	08/01/2014	\$32.69	\$9.91	\$8.80	\$0.00	\$51.40
	12/01/2014	\$32.69	\$9.91	\$9.33	\$0.00	\$51.93
	06/01/2015	\$33.04	\$9.91	\$9.33	\$0.00	\$52.28
	08/01/2015	\$33.04	\$10.41	\$9.33	\$0.00	\$52.78
	12/01/2015	\$33.04	\$10.41	\$10.08	\$0.00	\$53.53
	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
WAGON DRILL OPERATOR <i>LABORERS - ZONE 1</i>	06/01/2014	\$34.35	\$7.30	\$12.70	\$0.00	\$54.35
	12/01/2014	\$35.10	\$7.30	\$12.70	\$0.00	\$55.10
	06/01/2015	\$35.85	\$7.30	\$12.70	\$0.00	\$55.85
	12/01/2015	\$36.60	\$7.30	\$12.70	\$0.00	\$56.60
	06/01/2016	\$37.35	\$7.30	\$12.70	\$0.00	\$57.35
	12/01/2016	\$38.35	\$7.30	\$12.70	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2013	\$40.49	\$10.00	\$14.18	\$0.00	\$64.67
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & GASFITTERS LOCAL 12</i>	03/01/2014	\$49.41	\$9.82	\$14.29	\$0.00	\$73.52
	09/01/2014	\$50.41	\$9.82	\$14.29	\$0.00	\$74.52
	03/01/2015	\$51.41	\$9.82	\$14.29	\$0.00	\$75.52
	09/01/2015	\$52.41	\$9.82	\$14.29	\$0.00	\$76.52
	03/01/2016	\$53.56	\$9.82	\$14.29	\$0.00	\$77.67
	09/01/2016	\$54.61	\$9.82	\$14.29	\$0.00	\$78.72
	03/01/2017	\$55.61	\$9.82	\$14.29	\$0.00	\$79.72
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						
Outside Electrical - East						
CABLE TECHNICIAN (Power Zone) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$25.66	\$8.70	\$4.48	\$0.00	\$38.84
For apprentice rates see "Apprentice- LINEMAN"						
CABLEMAN (Underground Ducts & Cables) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$36.55	\$8.70	\$6.58	\$0.00	\$51.83
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN CDL <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$29.94	\$8.70	\$6.05	\$0.00	\$44.69
For apprentice rates see "Apprentice- LINEMAN"						
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$23.52	\$8.70	\$5.24	\$0.00	\$37.46
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class A CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$36.35	\$8.70	\$9.43	\$0.00	\$54.48
For apprentice rates see "Apprentice- LINEMAN"						
EQUIPMENT OPERATOR (Class B CDL) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$32.08	\$8.70	\$6.59	\$0.00	\$47.37
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$23.52	\$8.70	\$3.72	\$0.00	\$35.94
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN -Inexperienced (<2000 Hrs.) <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$19.25	\$8.70	\$2.85	\$0.00	\$30.80
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	09/01/2013	\$42.77	\$8.70	\$11.78	\$0.00	\$63.25

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
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Apprentice - LINEMAN (Outside Electrical) - East Local 104

Effective Date - 09/01/2013

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$25.66	\$8.70	\$4.24	\$0.00	\$38.60
2	65	\$27.80	\$8.70	\$4.71	\$0.00	\$41.21
3	70	\$29.94	\$8.70	\$5.43	\$0.00	\$44.07
4	75	\$32.08	\$8.70	\$6.16	\$0.00	\$46.94
5	80	\$34.22	\$8.70	\$6.88	\$0.00	\$49.80
6	85	\$36.35	\$8.70	\$7.62	\$0.00	\$52.67
7	90	\$38.49	\$8.70	\$8.83	\$0.00	\$56.02

Notes:

Apprentice to Journeyworker Ratio:1:2

TELEDATA CABLE SPLICER <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$26.33	\$4.18	\$2.79	\$0.00	\$33.30
TELEDATA LINEMAN/EQUIPMENT OPERATOR <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$24.78	\$4.18	\$2.74	\$0.00	\$31.70
TELEDATA WIREMAN/INSTALLER/TECHNICIAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	07/16/2012	\$24.78	\$4.18	\$2.74	\$0.00	\$31.70
TREE TRIMMER <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/29/2012	\$17.18	\$3.37	\$0.00	\$0.00	\$20.55
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is not on the ground. This classification does not apply to wholesale tree removal.						
TREE TRIMMER GROUNDMAN <i>OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104</i>	01/29/2012	\$15.15	\$3.37	\$0.00	\$0.00	\$18.52
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours) unless otherwise specified.

* Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

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The Massachusetts Prevailing Wage Law

M.G.L. ch. 149, §§ 26 – 27

NOTICE TO AWARDING AUTHORITIES

- 'The enclosed wage schedule applies only to the specific project listed at the top and will be updated for any public construction project lasting longer than one (1) year.
- 'You should request an updated wage schedule from the Division of Occupational Safety if you have not opened bids or selected a contractor within 90 days of the date of issuance of the enclosed wage schedule.
- 'The wage schedule shall be incorporated in any advertisement or call for bids for the project for which it has been issued.
- 'Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project.

NOTICE TO CONTRACTORS

- The enclosed wage schedule, and any updated schedule, must be posted in a conspicuous place at the work site during the life of the project.
- The wages listed on the enclosed wage schedule must be paid to employees on public works projects regardless of whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- The enclosed wage schedule applies to all phases of the project including the final clean-up. Contractors whose only role is to perform final clean-up must pay their employees according to this wage schedule.
- All apprentices must be registered with the Massachusetts Division of Apprentice Training in order to be paid at the reduced apprentice rates. If a worker is not registered with the Division of Apprentice Training, they must be paid the “total rate” listed on the wage schedule regardless of experience or skill level. For further information, please call (617) 727-3486 or write to the Division of Apprentice Training, 399 Washington Street, 4th Floor, Boston, MA 02108

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Workforce Development/Division of Occupational Safety within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

_____, 2014

I, _____,
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by
_____ on the _____

(Contractor, subcontractor or public body) (Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

DIVISION OF OCCUPATIONAL SAFETY, 399 WASHINGTON STREET, 5TH FL., BOSTON, MA. 02108

NOTE: Every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority.

**DRAWINGS MAY BE OBTAINED THROUGH
THE PURCHASING DEPARTMENT**

(Call to ensure availability 617-796-1220)

(6 PAGES)

END OF SECTION